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Original Lectures.

AMPUTATIONS IN

GUNSHOT FRACTURES OF THE FEMUR;

BEING REMARKS MADE AT THE MEETING OF
THE SURGICAL SECTION OF THE N.Y. ACADEMY OF MEDICINE

Held Nov. 28, 1863.

By FRANK H. HAMILTON, M.D.,

PROF. OF MILITARY SURGERY AND FRACTURES AT BELLEVUE HOSP. MED.
COLLEGE, AND LONG ISLAND COLLEGE HOSPITAL; SURGEON
TO BELLEVUE HOSPITAL; LATE MEDICAL INSPECTOR,
TOR, U.S.A.

LECTURE I—PART I.

I REGRET, Mr. Chairman, that my observations have not assumed a more definite form, but my impression is that a greater lapse of time would not bring them to anything more definite; I mean to say, I do not think that any additional accumulation of cases or of figures would bring me to any other result or conclusion than that to which I have arrived, because I am constantly impressed with the contrary results of figures as compared with the uniformity of conclusions drawn from individual impressions. In the matter of statistics there are so many elements to be taken into account, that it is impossible to speak of the results in a didactical way. I imagine, gentlemen, what seems so difficult and complicated to us, would assume the form of simplicity when we come to treat the individual cases and take into account all the conditions under which the patient may be placed. For example, how is it possible, in the statistics, to furnish us with the condition of the patient, whether he was suffering from scurvy or not? How is it possible to be informed concerning all the details of nursing and treatment? We are not informed as to whether there was any special suffering from tedious or difficult transportation—in a word, we have nothing but the mere results. On the other hand impressions are pretty uniform, and before I read what I have to say upon the subject, I would like to criticise some of the statements made by Dr. Krackowizer as to the result of figures, but I should regret if certain impressions already made upon the profession should be disturbed. First, as regards primary compared with secondary amputations. Since the time of Hunter and Fauer, except those gentlemen in Paris in '48, surgeons have advocated secondary in preference to primary amputations in field practice. That was not field practice in '48. The fight was simply in the street; a street fight, if you please, among citizens, and not soldiers worn out with campaigning. After they were wounded they were carried at once into the best hospitals in Paris. The practice was essentially civil practice, and it is not surprising that these conclusions should be at variance with the generally received opinion. In our own Astor Place Riot, which was also a street fight, the same result was noted, and for the same reason,—every case operated upon, I believe, died.

Next, I wish to take exception to the idea that we should not regard as a condition of saving the limb the removal of splinters of bone. Whatever figures may show in support of such a view, the experience of almost every surgeon is to the contrary. I believe that the wound of exit should be explored and all loose splinters of bone be removed; those that are firmly imbedded should be left. I consider this a condition almost essential to recovery. Lastly, I would object to the treatment of cases without apparatus. I believe that a certain amount of retentive means, together with moderate extension and coapting splints, is requisite.

I have a record of fifty-eight cases which were seen at times ranging from twenty-four days to nineteen months after the occurrence of the accident. Under three months

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after the accident there are twenty-one cases, over three months thirty-seven cases, over four months twenty-two cases, over six months nine cases, over seven months seven cases, over ten months two cases, over nineteen months one case. I have made a careful observation in a few of these cases in reference to the discharge of fragments: in twelve there was a discharge of fragments, and in twelve there was none. Of the whole number eight have ceased to discharge and forty-nine have not. As to the point of fracture two were situated in the neck of the femur, two in the trochanter major, five in the upper third of the shaft, twenty-three in the middle third, and nineteen in the lower third. The shortening is never less than an inch in any of the cases that I have measured, the greatest difference being four inches and a half. I think the average of shortening will be about two inches. The largest number are crooked, but a respectable minority are very nearly straight. There are one or two cases in which the bone was merely penetrated without being fractured.

I will here give a brief summary of the cases in a tabular form. (See Table on next page.)

I will repeat my impressions, if it be proper that I call them my impressions, rather than conclusions. They are, I. That in compound gunshot wounds of the upper third of the femur amputation should never be performed. II. In the lower fifth, or I might better say the lower eighth of the thigh, where there is a probability of the joint being involved, the patient should have the chance which amputation offers to him in preference to any attempt to save the limb. Any attempt to save the limb may be followed by destructive inflammation of the joint. III. Between the lower eighth and upper third I would only say that you must be governed by the circumstances which would ordinarily govern you anywhere else. If, for example, your patient is scorbutic, I do not think that it is best to attempt to save the limb. If you knew the patient had to be carried a long distance, and as is usual over rough roads, I should prefer not to attempt to save the limb. If the patient were an officer he could, under the circumstances, receive more care and have a better chance. If the bone be very extensively comminuted, and that you may only judge of approximately, I would not attempt to save the limb. Then if I should attempt to save the limb I should remove all loose spicula of bone through the orifice from which the ball emerged, for it is in that direction that you will find them if they are present. I would make it a condition that the patient should have a comfortable shelter; for instance, a tent. I would require a certain amount of extension to the limb, such as may be obtained best by Buck's apparatus, and that great diligence should be exercised in dressing, and that the patient should be sustained, not by brandy and whiskey, but by good wholesome food, the stimulants being used only to promote an appetite.

PENETRATING WOUNDS OF FEMUR.

CASE 1—is an example of fracture of the femur, by the conical bullet used in Colt's large revolver. This man, Hawkins, of the 4th U.S. Cavalry, was wounded at Strasburg, Va., June 1, 1862, and when I saw him in the Camden street hospital, four months after the injury was received, the wound was still discharging pus. The bone was united, but with much shortening, and very much bent.

CASE 4.—James S. Mussy, private, 16th U.S.V., was wounded at Gaines Hill, Va., June 27, 1862, by a round ball, it is believed, which entered the right nates from behind, passing entirely through the right trochanter major. Dr. Hasson informs me that he could pass his finger through the hole in the bone, which was round and smooth, and the bone did not seem to be broken.

When I examined this man, three months after the accident, in the Camden street hospital, Baltimore, the wound still continued to discharge, from which circumstances I inferred that some necrosis existed at the time. The leg was not shortened or deformed.

Table of Fifty-eight Cases of Gunshot Fractures of Femur.

Case.	Point of Fracture.				Remarks.	Side.	Cause.	Apparatus.	Result.	Time Seen.	Shortened.	Condition.	Discharge.	Frag. of Bone come away.	Remarks.
	Neck.	Major Trochanter.	Upper Shaft.	Lower Shaft.											
1						Right.	Pistol ball, large.	Never treated as fracture.	Union.	4 mos.	Much.	Quite crooked.	Pus.		{ Was taken to Richmond, and the fracture was not discovered until six weeks after, when the bone was united. Patient looks badly. In Confederate Hospital. Seems to be doing well. Confederate officer, sitting up. Ball passed through 2 inches above condyle; seems to have separated there; unfavorable. Buck's apparatus applied 11th day; doing well. Buck's apparatus applied only 3 days. Ball flattened, having struck the bone sideways. Support and extension imperfect. Buck's applied on 8d day; had Smith's splint before; prefers Buck's. No splint applied before Smith's.
2						"	Colt's Revolver.		"	4 "	2 inches.	Crooked.	"		
3						"	Round ball.		"	8 "	"	Straight.	"		
4						"	"		"	8 "	"	"	None.		
5						"	"		"	3 "	"	"	"		
6						Right.	Rifle "	Never treated as fracture.	Union.	3 "	2 1/2 in.	Pretty straight.	"		{ Still in bed. Struck the bone, but did not break or penetrate it. Ball flattened. Considerable motion at knee-joint; several fragments of bone. Necrosis exists. Walks without cane, and with a slight halt. Still in bed; has diarrhea. Can flex and extend leg as well as other. Joint involved; will probably get better. Double inclined plane first employed.
7						"	"		"	26 days.	2 "	Straight.	Slight.		
8						"	"	No apparatus on limb.	"	26 "	Short.	Crooked.	Pus.		
9						"	Round	Double inclined plane.	Nonunion.	26 "	"	"	"		
10						"	"		"	26 "	"	"	"		
11						Left.	"	No apparatus.	"	24 "	"	"	"		{ Necrosis exists. Patient looks feeble. Still in bed; has diarrhea. Can flex and extend leg as well as other. Joint involved; will probably get better. Double inclined plane first employed.
12						Right.	Rifle "	Long side splint; no ext'n.	"	24 "	"	"	Excessive.		
13						Left.	"	No apparatus.	"	24 "	"	Everted.	Slight.		
14						"	"	Long straight splint.	Union.	27 "	1 1/2 in.	"	"		
15						"	"	Buck's app.; ft. bed raised	Nonunion.	24 "	"	"	"		
16						"	Musket "	Buck's apparatus.	"	24 "	"	Straight.	Pus.		{ Still in bed. Struck the bone, but did not break or penetrate it. Ball flattened. Considerable motion at knee-joint; several fragments of bone. Necrosis exists. Walks without cane, and with a slight halt. Still in bed; has diarrhea. Can flex and extend leg as well as other. Joint involved; will probably get better. Double inclined plane first employed.
17						"	Rifle "	"	"	24 "	"	Crooked.	Enormous.		
18						Right.	"	"	"	24 "	Short.	"	"		
19						Left.	"	None.	"	24 "	"	Bent back at fract.	Slight.		
20						"	"	Smith's ant. splint.	"	24 "	"	Bent.	"		
21						"	"	Buck's apparatus.	"	24 "	"	"	"		{ Still in bed. Struck the bone, but did not break or penetrate it. Ball flattened. Considerable motion at knee-joint; several fragments of bone. Necrosis exists. Walks without cane, and with a slight halt. Still in bed; has diarrhea. Can flex and extend leg as well as other. Joint involved; will probably get better. Double inclined plane first employed.
22						"	"	Smith's ant. splint.	"	24 "	"	Straight.	"		
23						"	"	Smith's ant. splint.	"	24 "	"	Slightly bent back at fracture.	"		
24						Right.	"	B.'s last, 5 d's, none prev.	"	27 "	"	Bent out at fracture.	Slight.		
25						"	"	" " 12 "	Union.	4 mos.	2 1/2 in.	"	"		
26						"	Round	" from 12th to 92d dy.	"	"	"	"	"		{ Still in bed. Struck the bone, but did not break or penetrate it. Ball flattened. Considerable motion at knee-joint; several fragments of bone. Necrosis exists. Walks without cane, and with a slight halt. Still in bed; has diarrhea. Can flex and extend leg as well as other. Joint involved; will probably get better. Double inclined plane first employed.
27						Left.	Rifle "		"	3 mos.	1 1/2 in.	Tolerably straight.	Ceased.		
28						"	"		"	4 "	1 "	"	"		
29						"	"		"	4 "	2 1/2 "	Bent out at fracture.	"		
30						"	"		"	4 "	2 "	Tolerably straight.	Slight.		
31						"	"		"	4 "	"	"	Free.		{ Still in bed. Struck the bone, but did not break or penetrate it. Ball flattened. Considerable motion at knee-joint; several fragments of bone. Necrosis exists. Walks without cane, and with a slight halt. Still in bed; has diarrhea. Can flex and extend leg as well as other. Joint involved; will probably get better. Double inclined plane first employed.
32						"	"		"	4 "	"	"	"		
33						"	"		"	4 "	"	"	"		
34						"	"		"	4 "	"	"	"		
35						"	"		"	4 "	"	"	"		
36						Right.	Rifle ball.	Straight splint.	"	19 "	1 1/2 in.	Straight.	Slight.		{ Still in bed. Struck the bone, but did not break or penetrate it. Ball flattened. Considerable motion at knee-joint; several fragments of bone. Necrosis exists. Walks without cane, and with a slight halt. Still in bed; has diarrhea. Can flex and extend leg as well as other. Joint involved; will probably get better. Double inclined plane first employed.
37						Left.	Canister.	"	"	6 "	Much.	Everted.	Free.		
38						Right.	Rifle ball.	"	"	6 "	"	Straight.	Free.		
39						"	Round	Straight app. after 9th dy.	"	3 1/2 "	1 1/2 in.	"	"		
40						"	"	Straight.	"	3 1/2 "	"	"	"		
41						"	ball.	"	"	3 1/2 "	"	"	"		{ Still in bed. Struck the bone, but did not break or penetrate it. Ball flattened. Considerable motion at knee-joint; several fragments of bone. Necrosis exists. Walks without cane, and with a slight halt. Still in bed; has diarrhea. Can flex and extend leg as well as other. Joint involved; will probably get better. Double inclined plane first employed.
42						Left.	"	"	"	3 1/2 "	Short.	"	"		
43						"	"	"	"	3 1/2 "	"	"	"		
44						Left.	"	"	"	3 1/2 "	"	"	"		
45						Left.	"	Smith's ant. splint.	"	3 1/2 "	2 in.	"	"		
46						Right.	"	Straight splint.	"	3 1/2 "	"	"	"		{ Still in bed. Struck the bone, but did not break or penetrate it. Ball flattened. Considerable motion at knee-joint; several fragments of bone. Necrosis exists. Walks without cane, and with a slight halt. Still in bed; has diarrhea. Can flex and extend leg as well as other. Joint involved; will probably get better. Double inclined plane first employed.
47						Left.	"	No splint.	"	3 1/2 "	1 in.	"	"		
48						Right.	"	"	Nonunion.	24 days.	1 1/2 in.	Very crooked.	"		
49						Left.	Frag. of shell.	Smith's ant. splint.	Union.	7 weeks.	"	"	"		
50						Right.	Rifle ball.	"	"	10 mos.	4 1/2 in.	Much bent out.	"		{ Still in bed. Struck the bone, but did not break or penetrate it. Ball flattened. Considerable motion at knee-joint; several fragments of bone. Necrosis exists. Walks without cane, and with a slight halt. Still in bed; has diarrhea. Can flex and extend leg as well as other. Joint involved; will probably get better. Double inclined plane first employed.
51						Left.	"	Buck's app.	"	7 "	1 "	Straight.	Ceased.		
52						"	Round	Straight	"	4 "	2 1/2 "	"	"		
53						"	Rifle ball.	Smith's ant. splint, & st'ght.	"	4 "	3 1/2 "	Slightly bent at fr.	Some.		
54						"	"	"	"	4 "	"	"	"		
55						"	"	Buck's app.	"	7 "	1 1/2 in.	Straight.	"		{ Still in bed. Struck the bone, but did not break or penetrate it. Ball flattened. Considerable motion at knee-joint; several fragments of bone. Necrosis exists. Walks without cane, and with a slight halt. Still in bed; has diarrhea. Can flex and extend leg as well as other. Joint involved; will probably get better. Double inclined plane first employed.
56						"	"	None ever applied.	"	7 "	1 1/2 in.	Everted.	"		
57						Right.	Rifle ball.	Smith's ant. splint.	Nonunion.	7 "	1 1/2 in.	"	Closed.		
58						Left.	"	None.	"	7 "	1 1/2 in.	Little back at fract.	Some.		
59						"	"	"	"	7 "	"	"	"		

Original Communications.

INTERESTING CASES OF GUNSHOT WOUNDS.

By DE WITT C. PETERS, ASST. SURG. U.S.A.

SURGEON IN CHARGE OF JARVIS GENL. HOSPITAL, BALTIMORE, MD.

THE following interesting cases are selected from a great number received in this Hospital after the battle of Gettysburg. They are presented on account of being somewhat novel, and also to illustrate the fact that we may, on first inspection of a desperate wound, be prone to prognosticate its fatal termination or *vice versa*.

CASE I. Gunshot Wound of Intestines and Bladder.—Private W. E., belonging to the 5th Mass. Battery, was admitted into the Hospital July 13, 1863. Patient states that on July 2, 1863, at the battle of Gettysburg, he was wounded, and was obliged to remain on the field several hours without attention. When received here his wants were properly attended to, and his wounds thoroughly examined. It was ascertained a musket-ball (probably conical) had penetrated the soft parts of the right gluteal region, at a point that was midway between the right great trochanter and the corresponding sacro-iliac symphysis. Its course was then upwards and across, making its exit just above Poupart's ligament and near the external abdominal wing on the left side. The abdomen was found greatly distended, tympanitic, and tender to the touch. His knees were drawn up, and his breathing was difficult, and mostly carried on by the muscles of the chest, and not in the least was it aided by the diaphragm. Gentle pressure over the abdomen caused gas and feces to escape freely out of the anterior wound, showing that the ball had perforated the intestines. A catheter was introduced into the bladder, when a slight quantity of very offensive urine oozed out, mingled with liquidated feces. The pressure of the instrument caused intense pain and irritation, and on removing it the canal was found charged with the feces, thereby proving the bladder was also complicated in the injury. The patient was fast reaching a typhoid condition, had a quick, wiry pulse, ranging at about 100, while his expression was anxious, and his teeth and gums were commencing to be covered with sordes. Altogether his case was thought to be hopeless, and I so informed him, as I thought peritonitis of an aggravated form had set in. The treatment consisted in applying emollient poultices to the abdomen, injecting small quantities of flax-seed tea into the bladder, allowing him the same to drink, administering enemas as they were required, and giving him full doses of opium until he was well under its influence, when it was lessened in quantity and kept up at regular intervals. The patient was ordered for his diet concentrated beef-tea and mutton-broth, and afterwards, as he improved, a more mixed diet. He was kept very quiet, and most faithfully nursed. At first the contents of the bowels escaped from time to time through the artificial anus, and were received by the dressings, which were changed frequently. It was under the above indicated system of treatment, with the precaution of persisting in keeping the patient in a recumbent position, for a long time after his bad symptoms had left him, that his wounds closed, and the functions of the intestines and bladder were completely restored. He was allowed a furlough to visit his home, Sept. 18, 1863, and was by us then considered almost a well man. Since that date nothing has been heard of his condition, and it is presumed he is still recovering from his severe injury.

CASE II. Gunshot Wound of the Thigh, and Secondary Hæmorrhage.—Private A. R., 18 years of age, belonging to the 62nd Pa. Vols., was wounded at Gettysburg, July 2, 1863, and he was admitted into this Hospital about ten days afterwards. On examination it was found a conical musket-ball had entered the right thigh near the tuberosity

of the ischium, and after passing about fourteen inches through the deep muscles of the thigh, emerged outside of the femur four inches above the knee-joint. He stated he bled very freely on the field; and after he was taken to a neighboring house, there was a recurrence of the hæmorrhage lasting all night.

The patient's general condition was very unfavorable, as he was exceedingly feeble and anæmic, and his wounds looked unhealthy. He was ordered rest, stimulants, generous diet, and mur. tinct. ferri, in divided doses. The wounds were dressed with a solution of permanganate potassa, as they predisposed to sloughing. On July 17, an alarming hæmorrhage occurred from both wounds. He was seen immediately, and the bleeding arrested by the use of liq. ferri persulphatis, graduated compresses and bandages. A firm compress and roller was also applied over the femoral artery. The patient was so much prostrated by the loss of blood that he required stimulants to be administered very freely. July 19.—There was to-day a recurrence of the hæmorrhage, which was as profuse as the last. The same treatment was resorted to, and was followed by the same result. July 23.—On examining the wounds it was found that a healthy reaction had been established, consequently the parts were dressed with cold water applications, while moderate pressure was continued along the course of the wound. July 28.—Another hæmorrhage as copious as the former one had taken place and was controlled by the pressure as heretofore. At a consultation the propriety of ligating the femoral artery, and even amputating, was considered, but it was thought either would prove fatal, as the patient was so much prostrated. The source of the hæmorrhage was a mystery, as it might come from a branch of the internal iliac instead of the profunda, and therefore ligating the femoral artery was an uncertain expedient and was not deemed advisable. The steady pressure by compresses and bandages was again resorted to, and over the femoral artery its force was increased. July 30.—The patient is rallying under the treatment, and there has been no hæmorrhage. August 6.—Since the last date the patient has complained of considerable pain in the parts for the past twenty-four hours, and while examining the wounds another bleeding ensued, which was followed by a discharge of sanious pus, and which is presumed to be the contents of an aneurismal sac. The use of the permanganate of potassa dressings is to be resumed. August 27.—There has been no further hæmorrhage. The wounds have been discharging healthy pus, and are healing. Sept. 20.—The patient is convalescing rapidly. The wounds are healed, and the limb is gradually strengthening and regaining its use. He goes about on crutches. Oct. 3.—The patient is now able to walk about briskly on one crutch, and he was to-day transferred to a General Hospital in his own State, with the prospect of soon being entirely cured.

CASE III. Gunshot Wound of the Leg, and Secondary Hæmorrhage.—J. D., aged 21 years, a private in the 39th N. Y. Vols., was wounded at Gettysburg July 2, 1863, and was admitted in this Hospital July 15.

On examination it was found a musket-ball had entered on the inner side of the right leg, at a point three inches below the knee-joint, and passing downwards and outwards, it emerged just above the external malleolus without injuring the bones. His general condition was good, and he stated he had not lost much blood on the field. He was ordered to be kept in the recumbent position, and simple dressings were applied. The parts progressed favorably until August 12, when without any apparent cause the limb became much swollen. A lotion of opium and acet. plumbi was ordered to be used to the leg, which rested easily on a pillow. Notwithstanding good attention the limb continued to enlarge, and the skin to become tense, and when fluctuation was discovered on the inner side of the leg a counter-opening was made there, although a traumatic aneurism was suspected. From the opening thus made there was discharged a large quantity of clotted blood and very fetid pus, but no active hæmorrhage occurred

until two days subsequently. The loss of blood was so great and so copious at this time that he was almost pulseless before it was arrested by compresses and bandages. The surgeon searched for the wounded posterior tibial artery, but the parts were much disorganized, and it could not be detected. The patient's general condition precluded any further attempt at an operation, and to sustain the man, he was obliged to resort to stimulants given both by the mouth and rectum. The stomach rejected all nutriment, and for several days he was supported by the injections. Under this treatment the patient rallied, and as quick as it was safe to expose the bleeding surface it was dressed with the permanganate of potassa in solution. The patient, as soon as he was able to retain his food, was ordered concentrated beef tea, chicken soup, and stimulants. He continued to improve, and his wounds to heal, and was considered entirely cured Oct. 30, 1863, when he was transferred to another General Hospital.

Remarks.—The sol. of permanganate of potassa has been used by us successfully in several cases where traumatic aneurisms were threatened. It was daily injected in a dilute solution along the tracks of the wounds. It acts by exciting healthy inflammation, and has powerful styptic powers, besides arresting ulceration and decomposition. In several hundred gunshot wounds we have tested its virtues, and are of the opinion that by its use we have prevented secondary hemorrhage from occurring in many instances where we had anticipated its taking place.

CASE IV. *Gunshot Wound of Head, Compound Fracture of Skull, Ball remaining within the Cranium.*—Serg. W. R., aged 23 years, belonging to the 7th N. J. Vols. Was admitted into this hospital July 10, 1863.

The patient states that at the battle of Gettysburg, July 20, 1863, he was wounded in the head, by what he now supposes to be a round musket-ball, and immediately he fell and became insensible. The ball penetrated the skull near the right protuberance of the frontal bone, passed directly inwards, was lost to sight, and lodged somewhere on the membranes or in the brain substance. The opening through the bone was similar to the same if made by a trephine, and the track of the ball could be followed on the dura mater with a probe for a considerable distance, as that membrane was detached from its natural connexions with the skull. He is not able to say whether or not there was much hæmorrhage. When received the parts were still open, and in making an exploration I readily inserted my little finger through the fracture, but detected no jagged bone pressing inwards, and also found the membranes not lacerated at the seat of injury. I could distinctly feel the pulsations of the arteries of the brain, and am convinced that the ball had not rebounded or dropped out, but had followed a course towards the back of the skull, where it still remained concealed. He further informs me that on recovering his senses he was not in the least paralysed, and was able to converse, and that his surgeon said, "you cannot possibly live." After a few hours he again became insensible, and remained so for two days, then rallied and has been rational ever since. The patient, on admission, was able to sit up, stand, and also to walk, but he carried his head reclining backwards, resting between the shoulders. He complained of great pain and dizziness if he attempted to change it to an erect position. There was not any perceptible loss of power, motion, or sensation, on either side of his body, and his general condition was favorable. He was directed to be put to bed and quietly to remain there, and above all he was not to converse or read. His hair was then cut short, and cold water dressings were kept to his head. His diet for the first period of the treatment consisted of gruel and very weak soups. There was no arterial excitement, therefore the treatment was for the most part expectant. His recovery was rapid, and on the 12th of August (about one month after he came here), at his earnest solicitation, he was granted a furlough to visit his home for fifteen days. At the expiration of his leave of absence he returned, and it was found he had

suffered no inconvenience from the journey. The wound, however, had not entirely closed, and since that date several pieces of bone have exfoliated. The patient was examined by the Invalid Board of Officers, authorized by the War Department a few weeks since, and was by them transferred into the Second Battalion of the Invalid Corps. He was cautiously tried on light duty at this hospital, but it was soon evident he was permanently disabled, and he has therefore been recommended by me for a discharge from the service. The patient at present labors under several dangerous symptoms. He complains of a constant dull pain, which he locates in the back of his head, which never leaves him, and which, he says, is like a dead weight. At night he suffers from unpleasant dreams and hallucinations, which sometimes cause him to wake in a state of great terror. His bowels are obstinately constipated, yet are readily relieved by a mild cathartic. He is also occasionally annoyed by nausea and vomiting after eating his meals. I have thoroughly tested the mind of this patient, and am of the impression that it is not impaired to any perceptible degree. I will add, however, that although cautioned against the use of stimulants he did, on one occasion, imprudently indulge in a glass of ale while outside the hospital grounds, and it came near costing him his life, for it quickly caused him to be very unruly, quarrelsome, and boisterous, far more so than was his usual custom, as he afterwards informed me, for his previous employment had been that of a bar-tender, and he was accustomed to use intoxicating liquors freely. This slight debauch confined him to his bed for several days, and the pain in his head was greatly augmented, and was accompanied by some heat of skin and febrile reaction, but he is now well again.

Remarks.—Military writers have described several of these cases where the ball has entered and remained within the cranium until the death of the person, which may be delayed for months or even years. In a case reported by Mr. Guthrie, the patient lived over one year. In all of these injuries death ensued suddenly, probably resulting from softening of the brain substance and the formation of an abscess. It would be almost useless to speculate on the exact locality of the ball in this case I have cited above, but that it is lodged either on the membranes of the brain or in the substance of the cerebrum is quite certain. The query arises—Will it become encysted and harmless? And this remains to be decided by time.

HOSPITAL GANGRENE IN THE DE CAMP GENERAL HOSPITAL.

By W. C. PRYER, M.D.,

ACTING ASSISTANT SURGEON, U.S.A.

BETWEEN the 17th and 25th of July, 1863, there were admitted into the De Camp General Hospital nearly three thousand prisoners of war, captured from the Confederate army, at the battle of Gettysburg. With but a few exceptions these prisoners were suffering from gunshot wounds received at some time between the 1st and 4th of the month already mentioned. From this large number of patients eighty of the more seriously wounded were admitted into the pavilion then under my care, and shortly after a division of tents was added to my charge, in which were placed about one hundred of those slightly wounded, or wounded in the upper extremities only.

The great majority of these patients were subsequently the subject of the sloughing process, commonly called hospital gangrene; and as this disease made its appearance under my observation in two epidemics, as it were, which differed somewhat in their general characteristics, it seems but proper that each of these forms should be considered separately. At the time of the admission of these patients their wounds had a healthy appearance, and up to about the 1st of August all those not mortally wounded were rapidly convalescing.

At about the time mentioned, however, the first epi-

demic began among the patients in the pavilion; those in the tents not being attacked until about ten days later.

The disease would run its course somewhat after the following manner:—A patient, whose wound would be progressing to a favorable result, would suddenly be seized by a chill, followed by a fever: that is, by heat of skin, frequency of pulse, headache, loss of appetite, a furred tongue, constipation of bowels, etc. No sweating stage, however, was observed. The wound, previously healthy, would assume an inflamed appearance, not immediately, for the constitutional symptoms would precede the local, by from twelve to twenty-four hours. The integument and subcutaneous areolar tissue surrounding the wound then became inflamed, and infiltrated with serum, afterwards with pus, and the sloughing would commence at the edges of the wound. The skin itself resisted the sloughing process longer than the subcutaneous tissues, and for that reason the edges of the wound would become undermined for some inches beyond the open surface, and portions of sound skin would project beyond the general circumference, giving the wound a ragged appearance.

The sloughing would advance, both by eating away the edges of the wound and by penetrating deeper into the subjacent tissue; but in no instance, during the first epidemic, did it involve any structure deeper than the deep fascia of the part affected.

In most cases the duration of the disease did not exceed ten days or a fortnight, at the end of which time the wound would again assume a healthy character, the exposed surface granulating very rapidly, while the appetite and general health of the patient would return.

It will be noticed at once that the disease described has all the characteristics of ordinary phlegmonous erysipelas, and, in fact, with the exception of a few points to be noticed presently, it differed from that disease but little.

Some of these points of difference were these:—First, the sloughing advanced more rapidly than is usual in phlegmonous erysipelas, and involved a large surface. Second, the contagious properties of the disease were much increased; so much was this the case, that at one time fully one-half the patients in the pavilion were affected by this sloughy condition. The third point of distinction between this and ordinary phlegmonous erysipelas was shown in the fact, that in several instances patients lying next to one affected by the form of gangrene already described, would take from him not this, but another form of the disease, which will be spoken of when describing the characteristics of the second epidemic.

After this first epidemic had run its course, or had been checked, the wounds, both in the pavilion and tents, assumed a healthy appearance, and so continued for about two or three weeks, when the second epidemic commenced.

In this the mode of attack was very different from that which has been described.

The chill, the fever, the sudden prostration, in fact, nearly all the symptoms of constitutional disturbance which usually mark the inception of an acute disease, were about. The first symptoms of gangrene were purely local, and would present themselves somewhat in this way.

The wound, which yesterday presented a perfectly healthy appearance, would to-day show in the midst of its healthy florid granulations, a small spot, perhaps a mere point, of a greyish hue. From this point the sloughing would commence, the spot enlarging and appearing, as it were, to eat its way into the wound, the newly formed tissue melting away as the disease advanced, until the wound had assumed its former proportions. The sloughing, however, would not stop here, but would invade the old and healthy tissues, involving not only the skin and subcutaneous and deep fascias, but all the tissues, including the bone itself. In fact, this second epidemic was more formidable than the first, whether it attacked a patient, who had previously suffered from sloughing, or one who had before remained unaffected.

No deaths, however occurred from this cause among the

patients under my care, but in all cases the sloughing finally ceased, and, as the dead tissue was removed, healthy granulations showed themselves underneath, and the healing process went on as before. It was certainly interesting to witness the readiness with which the patients recovered from the repeated attacks, and the rapidity with which the wound closed up, when once the granulations began to form.

For instance, in one case, where a patient, suffering from an exsection of the elbow-joint, and who had recovered from one attack of gangrene, was again attacked, the sloughing went on until the wound involved fully one-half the superficial surface of the posterior aspect of the limb, and the ends of all the three bones entering into the elbow-joint were exposed and necrosed.

Yet this patient ultimately recovered and went on his way to Dixie with a limb which promised to become serviceable. In drawing a distinction between these two forms of gangrene it is not intended to give the idea that they are different diseases, but simply to note the fact of the appearance of gangrene at different times, in different forms. In the first form the erysipelas appeared as the most prominent characteristic, while in the second this was entirely wanting.

In the first, the constitutional symptoms were very marked and preceded the local manifestations; while in the second the disease began as a local disorder entirely, although the symptoms of constitutional irritation, of course, presented themselves as the disease advanced.

The fact, however, that one form seems to be able to produce the other, appears to establish the link between the two.

Treatment.—In the form of the disease first noticed, the treatment adopted was—first, to clean out the alimentary canal, and to do this a mercurial (mass. hyd.) followed by ol. ricini, was generally preferred. After this the patient was put upon a tonic course of treatment, and in connexion with this the chlorate of potassa was made use of, and in my opinion the benefits cannot be overrated.

The prescription was as follows:—R Potassa chloratis, ʒij.; Tr. cinchonæ c., Aq., āā, ʒiv.; M.; Table-spoonful four times a day.

Stimulants were also used at the rate of four to sixteen ounces per twenty-four hours.

Locally the treatment was that of ordinary phlegmonous erysipelas at first. Afterwards, as the sloughing commenced, creasote was applied pure, also a wash of creasote gtt. xxx. to aq. Oj. The edges of skin overlapping the wound were incised to prevent the burrowing of pus.

The patients were separated as far as possible from the others, and those able to walk were ordered to remain out of the pavilion or tents in the open air, as much as they were able to do so.

Each patient was supplied with a sponge, for his own use solely, and these sponges were washed out daily with hot water and Labarraque's solution. Chloride of lime was also used freely. The treatment during the second epidemic was somewhat the same; the points of difference being that more attention was paid to the local than to the constitutional affection. The constitutional treatment consisted simply in supporting the patient by good diet, tonics, and stimulants.

Locally, the application found of the most benefit was one of pure pyroligneous acid, applied once a day. In connexion with this, the wound was well syringed out with Labarraque's solution, twice or three times a day, and dressed as often with oakum saturated with a wash made of pyroligneous acid ʒi. to ʒij. to aq. Oj. In some cases nitric acid was used, and when the slough following its use came away, the wound was dressed with the pyroligneous acid wash. Bromine was not to be obtained until the gangrene had disappeared from among us, so that no trial of it was had. In reviewing the treatment adopted, it is proper to observe that it might be improved by substituting for the sponges used in cleaning the wounds, pieces

of soft cloth, or some such material, not too valuable to be destroyed after being used a single time.

In this way the wounds could be kept entirely free from contact with decomposing matters and greater cleanliness thus insured, for, as far as my observation goes, the beginning and the end of the law of treatment of hospital gangrene is contained in the one word—cleanliness.

DE CAMP GENERAL HOSPITAL,
DAVID'S ISLAND, N. Y. H., Nov. 23, 1863. }

EXPULSION OF TAPEWORM.

By A. M. VEDDER, M.D.,

SCHENECTADY, N. Y.

THE following case of the expulsion of tapeworm by pumpkin seeds occurred in my practice, which I consider of sufficient importance to merit a place in your valuable journal:—

Mrs. —, a married lady, æt. 22 years, has been troubled with tapeworm since Sept. 1862. Her medical attendant prescribed turpentine and castor oil āā . $\frac{3}{4}$ ss., none of the worms followed; subsequently santonine pills were taken; same result. A few months after she again took turpentine $\frac{3}{4}$ j., without any material effects. She was then advised to take pumpkin seeds, which she took, none of the worm following. In Nov. 1863, she was recommended to take the pumpkin seeds again, which she did, as follows:—On Saturday morning, fasting, took three tablespoonfuls of the seeds, previously peeled, dried, pulverized, and mixed with sugar; half an hour after, took $\frac{3}{4}$ ss. castor oil, which was repeated several times during the day; on Monday morning repeated the dose of the seeds, followed by the oil. On Monday evening she passed at one stool the entire worm, measuring eighteen feet nine inches. She took in all five ounces of oil, fasting fifty hours. I ought to have mentioned that she had also tried the male fern. To get the curative effect of pumpkin seeds, absolute fasting is a *sine quâ non*.

Progress of Medical Science.

PREPARED BY E. H. JANES, M.D.

ON THE TREATMENT OF RHEUMATIC FEVER.

THE *British Medical Journal*, Aug. 1, contains an article by J. Birkbeck Nevius, M.D., in which the following method of treating rheumatism is set forth; a course which he has pursued for the last fifteen years with better satisfaction than other methods from time to time adopted. The treatment is based upon the acknowledged periodicity of the disease, as shown by the general aggravation of the pain and other symptoms as night comes on; the copious sweating, &c.; also upon the long continuance, and liability of the illness to return after apparent recovery; and upon the great value of iodide of potassium in chronic rheumatism. The treatment consists in combining quinine with iodide of potassium and commencing their administration from the first, without any reference to acute pain or febrile excitement that may exist. The dose never exceeds two grains of quinine with five grains of iodide of potassium four times a day. This causes the thick creamy fur to disappear from the tongue more rapidly than other methods.

With a view to relieve pain and to secure rest, he always leaves two or three doses of opium pills or Dover's powder with the nurse, to be given successively, if the patient is in severe pain; but the dose is seldom required to be repeated, owing to the next element of the treatment, which consists in "the employment from the very first of steam baths, even when the patient is so helpless that it is impossible to move him from the bed on which he is lying." A couple of common red bricks are placed in an oven hot enough to bake bread, and left there for half-an-hour, when they are taken out,

and each folded in a piece of common flannel thoroughly soaked in vinegar, and laid upon plates and placed one about a foot from the shoulder, and the other about the same distance from the opposite leg—the patient's body-linen having been previously removed—the bedclothes are then to cover the bricks and the patient closely round the neck. We thus obtain a most refreshing acid steam-bath, which may be renewed by removing one brick, and replacing it with another hot one kept in reserve. In about fifteen or twenty minutes the bedclothes and plates are removed, and the patient instantly mopped all over very rapidly with a towel wrung out of cold water, and then quickly rubbed dry. Dry, warm linen and dry bedclothes are at once put on, and the patient is said to experience speedy relief, both from the severe pain and the exhausting acid sweats. The linen is easily changed by tearing the night-shirt open from top to bottom down the back; the sleeves are then slipped over the patient's arms, and the torn edges gently tucked under his sides with but little disturbance. The sheets are changed by fastening the corners of the dry sheet to those of the damp one, and as the latter is gently drawn from the patient the other follows it and is left in its place. During the fifteen years he has pursued this practice he has had to apply a blister over the heart only in three instances, and this because the patient complained of uneasiness in the chest, and not because of pericarditis, there having been not one case of distinct rheumatic affection of the heart. He has rarely found it necessary to give two steam-baths in bed, the patient almost always being able to have the second whilst sitting upon a chair. The patient is to sit naked on a pillow or folded blanket on a close-bottomed chair, under which is a can containing a couple of gallons of boiling water. Blankets are then folded round his neck, and made to surround him like a tent reaching the floor. The steam can be renewed occasionally by a red-hot brick put into the can. After about fifteen or twenty minutes the blankets are removed and a couple of quarts of cold water poured over his shoulders; or, when the patient is afraid of this treatment, he may be wrapped from head to foot with towels wrung out of cold water. By this treatment he is said to be invigorated instead of weakened, and perspirations do not follow. These baths, followed by the cold douche, are continued after the patient is able to walk about, and if there is any great tenderness of any one particular joint, an opiate embrocation, containing in addition either chloroform or tincture of aconite, should be gently painted over the part two or three times a day. These then are the essentials of the treatment: quinine and iodide of potassium from the first, and the steam-bath, with the subsequent cold sponging; and, as an adjunct, opium in small doses, when necessary to procure sleep."

N.B.—In the remarks on the "Hæmostatic Treatment of Cholera," &c. reference should have been made to an article published in the Dublin Quarterly Journal of Medical Science, by Thomas A. Wise, M.D., &c. This by some inadvertence was omitted.

DUTCH TRANSLATION OF PROF. GROSS'S SURGERY.—We have had an opportunity of examining the first volume of Dr. J. D. Sachse's translation of Prof. Gross's Surgery, published at Nieuwediep the present year. This volume constitutes one-fourth of the whole work, so that the Dutch translation will form four volumes. The part we have seen is very elegantly got up, and the publisher writes that it has been received with great favor by the profession in Holland. Prof. Gross has reason to be gratified at the superior style in which his work is offered to his brethren abroad, and also with the flattering reception it has met with.—*Medical News*.

Reports of Societies.

NEW YORK COUNTY MEDICAL SOCIETY.

REPORT OF COMMITTEE ON SARRACENIA PURPUREA.

THE Committee on Intelligence submitted as their labors for the past month (see the following report as to the general character and medicinal properties of *Sarracenia Purpurea*):—The Committee having had no opportunity to test this plant, as a medicinal agent, themselves, submitted to the Society the following, as a resumé of the communications in various medical journals, respecting the remedial properties and botanical characteristics pertaining to it. It appears from reliable authority that about 1752, Dr. Sarrazin, Regius Professor of Anatomy and Botany at Quebec, Canada, sent to Tournefort this peculiar plant, who named it *Sarraceira*. This name was afterwards changed to *Sarracenia*, and the color of the flower suggested the specific annex of *purpurea*. It is not certain that Drs. Sarrazin, Tournefort, or others, to whom it was at that time known, were aware of its medicinal properties; nor does it appear that for nearly a hundred years was this plant used as a medicinal agent, except that the leaves had been employed as a cathartic, deobstruent, and tonic, by the "Eclectics."

The *Sarracenia* has many common names, such as Indian-cup or pitcher-plant, side-saddle flower, huntsman-cup, fly-trap, trumpet-plant, or muc-ca-kem-ma-dos, i.e. frog's-leggin,—an Indian appellation. It is an indigenous perennial plant, to be found throughout the whole of North America and the Lower Canadian provinces; its actual limit being from the black coast of Labrador to the savannahs of Florida, and the shores of the Gulf of Mexico. The *Sarracenia* belongs to the tribe of water-plants, and is only found in wet, marshy ground, but it grows in such places in great abundance. It belongs to the natural order, *Sarraceniacæ*; Sex. Sys., *Polyandria monogynia*. Dr. King, of Cincinnati, states, that "there are several varieties found in the swamps of Mass., and in the Southern States, such as the *S. heterophylla*, *S. rubra*, *S. flava*, *S. variolaris*, all of which probably possess similar medicinal virtues. The *S. purpurea*, however, is the only one of the species generally noticed in Nova Scotia and the adjacent provinces. In the first volume of *Transactions of the Am. Med. Association*, published in 1848, occur several reports on indigenous remedies. In one of these reports, by Dr. F. P. Porcher of South Carolina, an elaborate notice of two species, viz. *S. variolaris* and *flava*, is given. The medicinal properties and analyses of the root of these varieties are very thoroughly investigated. Specimens of the root were submitted by Dr. Porcher to Professor C. U. Shepherd, for analysis, the result of which was as follows:—Lignin—coloring matter and traces of a resinous body, containing an acid salt of lime (the acid being neither the tannic nor gallic—possibly one altogether new), and a salt of some alkaloid, related, perhaps, to cinchonia, which, should it prove new, may be called the *sarraceniic*. Its general action on the system is minutely described by Dr. Porcher, who recommended it in dyspeptic cases. Prof. Cleaveland has pointed out its well marked effects on the ganglionic system, and makes the following remarks:—"My experiments are confirmatory of the utility of the plant in cases where there is a sluggish or torpid condition of the stomach, intestines, liver, kidneys, uterus, and the various functional derangements, and it must be evident that this plant possesses valuable properties. It is even possible that a new salt, similar in importance to morphia or quinia, may be extracted from it, and thus a new and valuable remedy may be added to our *materia medica*. A proximate analysis of the *sarracenia purpurea* made recently by Theobald Frohwein, a pharmaceutical chemist of this city, gives the following result:—"Organic Elements.—Traces of volatile

oil, gum, starch, vegetable albumen, tannin, resin, bitter principle, with acid reaction and extractive matter. Inorganic Elements.—Sulph. lime, carb. acid, sulph. acid, phosph. acid; traces of lime, magnes., potass. and sod., iron, and silicic acid. From this analysis it would seem that an alkaloid does not exist in the root of the *S. purpurea*, and it might be considered only a mild tonic, on account of the bitter principle which it contains.

In the year 1862, Herbert Chalmers Miles, Surgeon, Royal Artillery, Halifax, N. C., read a paper by proxy, before the February meeting of the London Epidemiological Society, on an Indian remedy for small-pox, in which he stated, that during an epidemic of variola at Halifax, in the spring of 1861, which was especially fatal among the Indians and negroes, an old Indian Doctress had arrested the pestilence with a remedy of extraordinary power in this disease. So well established was her fame with the Indians, that when sick they resorted to her rather than to the white doctors, whom they considered "no good." Capt. Hardy, of the Royal Artillery, stated that the old squaw's remedy had long been known among the Indians as an infallible cure for small-pox.

From the information gathered from the Indians, the following observations have been carefully sifted:—1st. In the case of an individual suspected to be under the influence of small-pox, but with no distinct eruption upon him, a large wine-glassful of an infusion of the root of the *sarracenia purpurea* is to be taken. The effect of this dose is to bring out the eruption. After a second and third dose, given at intervals of from four to six hours, the pustules subside, apparently losing their vitality. The patient feels better at the end of each dose, and in the graphic expression of the Micmac, "knows there is great change within him at once." 2d. In a subject already covered with the eruption of small-pox in the early stage, a dose or two will dissipate the pustules, and subdue the febrile symptoms; the urine, from being scanty and high-colored, becomes pale and abundant; whilst from the first dose the feelings of the patient assure him that "the medicine is killing the disease." Under the influence of the remedy, in three or four days the prominent features of the constitutional disturbance subside, although as a precautionary measure the sick person is kept in camp until the ninth day. No marks of the eruption (as regards pitting, &c.) have been left in cases examined that were treated by the remedy. 3d. With regard to the medicine acting (as is believed by the Indians) in the way of a preventive in those exposed to the infection, it is curious to note that in the camp when the remedy has been used, the people keep a weak infusion of the plant constantly prepared, and take a dose occasionally during the day, so as to keep the antidote in the blood.

In a second paper of Dr. Miles, published in the *London Lancet*, March, 1863, he states that the foregoing observations were borne out in every instance in which the remedy was used among the Indians, and are thoroughly corroborated in the case of a white person, a narrative of which is given. The most marked results of the administration of the *sarracenia purpurea* in persons already covered with varioloid eruption are, 1st, Rapid diuresis, with immediate lessening of the febrile symptoms, and more tardily it acts as an evacuant on the large intestines. 2d. On a repetition of a dose of the decoction (better after three or four hours than at longer intervals), the mitigation and obvious improvement, should any symptoms of cerebral disturbance be present. 3d. Its extraordinary effect (within a brief period) in altering the character of the cutaneous eruption. It seems to arrest the morbid process, and induce a healthy instead of diseased action. The pustules appear simply to be deprived of their vitality; they desiccate and fall away. 4th. The prevention of pitting; consequent, it may be supposed, on the whole nature of the pustule being changed in the manner just noted. Dr. J. H. Richardson, of Toronto, who furnished a report of the corroborative case in a white person above referred to, states in his notes concerning it as follows:—"On the whole, I must conclude

that the effect produced by the sarracenia was most satisfactory and well marked. The disease continued very severe until it was administered, and became entirely changed in its severity after the administration of the third dose, the effect being due to it alone, as no other medicines were given after it was commenced. I am forced to the conclusion that the secondary fever was much controlled by it, and that desiccation took place much more rapidly than would have occurred otherwise. Although the eruption was confluent on the face, the patient recovered without being pitted." The Indian authority for its use asseverates with peculiar emphasis that the root alone is efficacious in small-pox, and that preparations of the leaves are useless in this disease. The directions to prepare it for use are, that the root when fresh gathered should be at once slowly and thoroughly dried, the thin fibres around it pared away, and the firm solid root alone used. The method of making the decoction is to slice from one to two ozs. of the dried root into thin pieces, place them in an earthen pot, add a quart of cold water, and permit the liquid to simmer gently over a steady fire for two or three hours, so as to lose one-fourth of its weight. It was repeatedly asserted that the fresh root was not so powerful as the dried root made into a decoction, as described.

A Dr. F. W. Morris, Resident Physician of the Dispensary, Halifax, has given a statement of its remedial powers, which would imply that this plant must possess active principles of great potency. He says, "This humble bog plant is a remedy for small-pox, in all its forms, in twelve hours after the patient has taken it. It is also as curious as it is wonderful, that however extensive or confluent the eruption may be, the peculiar action of this remedy is such, that very seldom is a scar left to tell the story of the disease." He also adds, "that its introduction to the professional and public service is due to Mr. J. S. Lane, to whom the Micmac Indians had given the plant, and the knowledge of its virtues."

He thus continues—"In 1861, when the whole province of Nova Scotia was in a state of panic, and patients were dying in the hospital at the rate of 12½ per cent. from May to August, Mr. Lane placed the sarracenia in my hands to decide upon its merits. After my trials then and since, I have been convinced of its astonishing efficacy."

The decoction is made with the powdered dried root, in the proportion of a dessert-spoonful to a pint of water, simmered down to half a pint, which is divided into two doses, the second dose being taken six hours after the first. Sugar should not be given with it. The only functional influence produced apparently is an increased flow of urine, which becomes also more limpid. The Sar. purpurea, I have reason to believe, is a powerful antidote in all contagious diseases, viz. Leprosy, measles, varicella, plague, typhus, and even syphilis. It is also a remedy in jaundice.

In contrast to this panegyric of Dr. Morris, it appears that at a recent meeting of the Medical Society of Nova Scotia, held at Halifax, the subject relating to the medicinal virtues of the Sar. pur. in small-pox was discussed, and resulted in a resolution being passed that there were not any reliable data upon which to base a positive opinion in favor of its value as a remedial agent.

Surgeon-Major Logie, Royal Horse-Guards, Windsor, in a letter to the *London Medical Times*, gives his experience in the use of Sar. pur. for small-pox, thus:—"I am happy to say that eleven cases of small-pox in our hands have recovered, under the peculiar influence of Sar. purpurea. This remedy I consider a boon to the public, for this reason: it is so easily managed, any one can make the decoction or infusion of the rootlike tea. It is given in two table-spoonful doses every four hours, while the patient is well nourished with beef-tea and arrow-root; four of the cases have been of a severe confluent character, and they have, throughout the disease, all been perfectly sensible, have had excellent appetites, been free from pain, and have not felt weak. The effects of this medicine, which I have carefully watched, seemed to arrest the development

of the pustules, killing, as it were, the virus from within, thereby changing the character of the disease, and doing away with the cause of pitting. In my opinion all anticipation of disfigurement from pitting may now be calmed, if this medicine is given from the commencement of the disease."

(To be Continued.)

American Medical Times.

SATURDAY, JANUARY 2, 1864.

POSITION OF THE SURGEON-GENERAL.

ONE of the most frequent questions now asked in professional circles is, What is the present position of the Medical Department of the Army? Is Dr. HAMMOND Surgeon-General, or is he not? If he is the properly appointed head of the Medical Staff, why is he not in his official seat, and engaged in the discharge of its responsible duties at this momentous period of our great national struggle? These are perfectly legitimate inquiries, and we are glad to have them put, and trust they will be pressed to their solution. They are indicative of that growing interest which the profession in civil life feel for its co-ordinate branch in the military service, and which has during the war ripened into the intimacy of brotherhood. We have, indeed, abundant proofs that the profession at large is beginning to feel a vital interest in all measures affecting the Medical Staff of the Army, and to regard them as having no small influence upon its own status. This is a most healthful feeling, and is to be fostered, for it binds in fraternal bonds two sections of a single profession. Whatever degrades one will certainly degrade the other to the same, perhaps to a lower, level.

From the inquiries to which we have alluded there is evidently a widespread and growing impression in our profession, that the Medical Department of the Army is not dealt with justly and honorably; that it is subject to the caprices of superior officers; that its operations are trammelled; that its best officers are placed in subordinate positions, or even driven from the service. These impressions are not, we regret to add, without foundation. The Medical Department is to-day suffering under a humiliation which both the medical staff and the profession at large ought to resent with the most determined protestations. In another column will be found a communication setting forth the grievances which Government should be called upon to redress. This circular is signed by some of the leading physicians, surgeons, and scientific men of the country, and we invite our readers to its careful perusal. From this document it appears that the Medical Department has been placed under an espionage as discreditable to the appointing power as it will prove unjust to the department. The pretence for this examination into the affairs of the medical Bureau is "fraud." To a fair and honest investigation into the affairs of his department there was no objection by the Surgeon-General; he courted such an examination, and, if necessary, would have demanded it. But such an investigation should have been by impartial and disinterested parties. The books and accounts should have furnished the basis of the prosecution, the Surgeon-General and his immediate assistants

should have been principal witnesses in the trial, and the testimony of contractors, agents, etc., should have been received only as collateral and circumstantial. Such should be the course of proceedings dictated by judicial custom, and by such an investigation only could real fraud be detected.

But so different has been this investigation that the whole affair has the appearance of a secret and deliberate conspiracy against the Surgeon-General directly, and against the medical department indirectly. The Commission is, in the first place, headed by a person known to be hostile to the Surgeon-General. This fact throws suspicion upon the object of the investigation. Our doubts of fair dealing are increased when we find this Commission evading the real sources of information, and seeking it persistently where it was necessarily prejudiced and unreliable. For, instead of commencing at the Surgeon-General's Bureau, and extending their investigations from this proper point of departure, they have carefully kept aloof from the central office, and have gone to commercial towns where they could examine contractors, agents, etc. From time to time they have thrown a morsel of their accumulating evidence into the secular papers, to give the public a relish for the approaching feast, and from these specimens we learn what will be the character of the final report. It will appear that the Surgeon-General has patronized certain houses, and rejected the cheap bargains of others. This charge is true, and has its explanation in the fact that the former furnished pure, the latter adulterated, drugs, or poor hospital stores. Such, we venture to say, will be the character of the entire body of evidence, could it be sifted to its ultimate condition. If the same mode of investigation into the business of the most successful commercial firms were pursued, it could be proved by every contractor of whom they *did not* purchase that the firm constantly and persistently defrauded itself.

But it would not be surprising if frauds were detected in some of the wide ramifications of the business of this Department. We are in the midst of a war which taxes to the utmost the Medical Bureau. Our armies are operating over immense territories, where great losses of material occur, requiring prompt supply from every available source, and at any existing price. To meet these often excessive demands Medical Purveyors are instructed to purchase without making requisitions. In the campaigns of McCLELLAN, GRANT, ROSECRANS, and BANKS, no earthly power could foresee the want, and provide for the ever recurring emergencies. But through the energy and perseverance of the Medical Department these great armies were well provided in all their movements, though at a vast expenditure of money. Undoubtedly a cavilling partisan commission would here find sundry items of expense that might have been curtailed, but a generous people, rejoicing in the glorious results, would spurn imputations of dishonesty. Least of all can such suspected or discovered malfeasance attach to the SURGEON-GENERAL. On the contrary, we believe that he has endeavored in every possible way to guard against fraud and corruption. Where irregularities have been reported, he has immediately instituted investigations, and has promptly corrected abuses. Nor has he stopped here. He has courted an examination into the affairs of his Department by the proper authority, requiring only that the investigation be thorough and impartial. While he has evaded no responsibility, no duty, how-

ever onerous, he has sought the ordeal of rigid scrutiny into all his official acts.

The SURGEON-GENERAL is to-day an exile from his official chair. While in the midst of duties of the utmost importance, and developing, maturing, and executing plans for the welfare of the army, and the improvement and advancement of the medical staff, a summary order sends him forth to a subordinate service, and the department is committed to the charge of an officer inexperienced in its official details. For several months the SURGEON-GENERAL has remained in this anomalous position, "waiting orders." It is admitted on every hand that he has been eminently successful in the administration of the Medical Department. No fault is found with his system of hospitals, with the promptness with which the armies are supplied, with the disposition of the individual members of the staff, nor indeed with any official act, and yet he is subjected to the insult of being compelled to "wait orders" in a distant department. The following, from a London contemporary, shows how a disinterested party regards such freaks of authority:—

"Appointed by the President, in spite of the old routine custom, over the heads of many seniors, he came to his task full of vigor, in the prime of life, and capable of great physical endurance. With a bold hand he surrounded himself with trustworthy subordinates, displacing many whom he did not think equal to the crisis, and proceeded energetically with his work. Large armies had to be provided for, a system of military hospitals to be organized, the examining boards to be reconstructed, and an army medical school and museum to be founded. Well, in these vast and useful works he seems to have succeeded beyond all expectation, and the confidence of the public in the new system of medical organization has been warmly expressed, and yet by the last accounts we learn that he has been suspended from his office, and ordered to a distant service, a commission having been appointed to inquire into the condition and management of his office. No charge against him or reason for the investigation has transpired."

The conclusion of every rational person must be in the language of the circular:—"If DR. HAMMOND has not forfeited his right to fill the position for which he had been selected by the President of the United States, he should be reinstated immediately. If, on the other hand, his honesty or competency is questioned, it is due to the President, the Senate, and the People, that this should be made known by the results of a formal procedure, and not from an investigation conducted by a secret, *ex parte*, and an anonymous commission. Let the accused have the same hearing as his accusers. Let the examination be as severe and searching as you please, so that it is but fair and open."

We are not wedded to men or measures. We advocated those changes in the Medical Department, which we had reason to believe would give it the greatest efficiency, without regard to personal or party interests. Regarding DR. HAMMOND as combining the largest number of qualifications for the office of SURGEON-GENERAL, we have supported him steadily in that position. Nor are we disappointed. He has filled the full measure of his official position with credit to himself, and honor to his profession. He stands before the world to-day the best representative of the two branches of the profession which we can present. It is the duty, and should be the privilege of every physician, whether in civil or military life, to sustain by every influence which he can employ

SURGEON-GENERAL HAMMOND as the head of the medical staff of the army. Whatever prejudices may have been created by any of his official acts should now be laid aside, and a united effort be made to restore him to his legitimate position, or secure him a fair and impartial hearing.

FAIRS FOR THE SANITARY COMMISSION.

THE method of raising funds for the Sanitary Commission by popular fairs is proving a very great success. Money flows into its treasury in a continuous and ever-enlarging stream. The first fair was held at Chicago, and realized the enormous sum of \$125,000. The second is in progress at Boston, and from reports we learn that on the first days upwards of \$50,000 daily was received. A third fair is now opened at Cincinnati on a scale of grandeur far surpassing the other exhibitions. The city and surrounding country are all absorbed in this great work, and evidently it is to be the most productive fair yet held. These successful efforts to replenish the treasury of the Commission have aroused the patriotic citizens of New York, and arrangements are in active progress for a great metropolitan fair. The preparations are on a scale but little less extensive and comprehensive than the World's Fair, formerly held in New York. The preliminary meeting consisted of three hundred gentlemen, representing the various industrial, commercial, trading, locomotive, financial, and charitable interests of the city. Two hundred ladies, selected for their energy and talents, are enlisted in the work, and twenty-nine committees have already been formed for the different departments. The financial success of this fair may be considered as already secured. The institution of these fairs throughout the country is a wise and happy enterprise. They combine the useful with the benevolent. The people still contribute their charities to the advancement of the good cause, but in a manner to realize more than ever those kindly reactionary influences which follow benevolent deeds.

AN AMBULANCE SYSTEM.

THERE are several gentlemen from Boston now in Washington to urge upon the Government the adoption of a uniform ambulance system. Their object is an excellent one, but they are a little too much disposed to push their own ideas to the rather uncourteous neglect of the at least equally intelligent convictions of others, and thus tend to diminish the weight of the influence of the profession with Government. Now, the organization of the ambulance system for the Army of the Potomac by DR. LETTERMAN, its Medical Director, promulgated and inaugurated in general order No. 85, August 25th, 1863, by GEN. MEADE, is the best and only practical organization feasible; it has been thoroughly studied out and tried under the advice of the SURGEON-GENERAL and the Sanitary Commission, and all that is now wanted is to secure its adoption at Head-Quarters at Washington for the whole military force of the United States.

IMMUNITY OF NEGRO TROOPS FROM YELLOW FEVER.

THERE was wise forethought in our Government in organizing negro troops for the occupation and defence of important military ports in the South. A moving army in that latitude may remain healthy though composed of troops from a much higher latitude, but when they become an army of occupation they are liable to be decimated by the

diseases peculiar to the climate. We have already proved the comparative immunity of colored troops from the diseases of the South, as fevers, diarrhoea, dysentery, etc. It now appears that the colored troops sent to Mexico by the French have not suffered from Yellow Fever, while the white troops have been swept off in vast numbers. We shall soon be in a position to prove the truth of these statements by a large number of the most reliable statistics.

SOCIETY FOR THE RELIEF OF THE WIDOWS AND ORPHANS OF MEDICAL MEN.

THIS Society recently had its anniversary dinner, at which the annual report was read. The Society is in a most prosperous condition. By the bequests of DRs. HARSEN and CAMMANN it realized \$20,000. It has now about \$50,000, mostly invested in mortgages and in 5-20 U. S. bonds. It has but few pensioners, and these it supplies with a meagre pittance. The Society ought to give more liberally to those entitled to its funds. The dinner passed off with the usual ceremonies of toasting and speech-making.

CIRCULAR IN BEHALF OF THE SURGEON-GENERAL.

1863.

SIR—Your attention is most respectfully invited to the present condition of the Medical Bureau of the War Department.

Under the Act approved April 16th, 1862, the administration of the Medical Department was intrusted to a Surgeon-General, with the rank of a Brigadier-General. An Assistant Surgeon-General was also appointed with undefined duties, eight Medical Inspectors and a Medical Inspector-General, charged, under the direction of the Surgeon-General, with "the supervision of all that relates to the sanitary condition of the army, whether in transports, quarters, or camps, and of the hygiene, police, discipline, and efficiency of field and general hospitals."

It is fair to presume that, in selecting Dr. William A. Hammond for Surgeon-General, the President and Senate were governed by good and sufficient reasons. Among those was, no doubt, the knowledge that he was a man in the prime of life, of strong constitution, and active and temperate habits; of liberal views and large and varied scientific acquirements, and of universal good repute.

Since the first of September, however, the Surgeon-General and Inspector-General have changed places; the latter is put in charge of the Medical Bureau, uncertain what day his plans and policy may be interrupted, while the former is, ostensibly at least, making long tours of inspection in the more remote fields of military operations. Under ordinary circumstances, this might be of little moment, but the present case has peculiar features.

About the first of July, 1863, a special Commission was appointed to investigate the conduct of the Medical Department. The precise objects of inquiry and nature of their instructions were not made known. It was an unfortunate circumstance that a person was placed at the head of that Commission whose relations with the Surgeon-General were known to have been unfriendly from a time when A. H. Reeder was one of Mr. Buchanan's Governors of Kansas, and certain land schemes in that unfortunate territory were exposed and thwarted by the late Senator Douglas, Gen. (then Capt.) N. Lyon, and Dr. Hammond. It was naturally expected that this commission would visit the Medical Bureau, inspect its books and records, examine the organization of the department, and inquire into its principles and rules of action; and, furnished with this outline chart, proceed to the investigation of the necessary details. This was not their course. They sedulously avoided the Surgeon-General and his office, and the most important sources

of information. They visited other offices freely, where only arithmetical results were filed, and offered liberal compensation to one of the Second Auditor's clerks to furnish them with data unofficially in odd hours. The offer was promptly declined. They called for, and were furnished with, voluminous reports, filling many hundred pages with mere arithmetical figures, from which no idea could be gleaned, except what every one knew, that large supplies had been bought and much money expended. These reports might show that large quantities of a given article were bought from a particular person, but did not show that the person in question was the only one in the United States having that article for sale at the time. Very purchases were sometimes made suddenly, and with unavoidable appearance of precipitancy. The Surgeon-General should have an opportunity to show what connexion these had with the great victories of the West, the Peninsular campaign, the retreat of General Pope, or the battle of Antietam. So far as expenditure of money is concerned, the most extravagant and irregular disbursements are constantly and necessarily made under authority of Commanding Generals after great battles. Such outlay has always been sustained by the Secretary of War, and the wisdom and justness of his decision we do not question. But the Commission asked for no explanations, and repeatedly refused to listen to them when offered. In their secret sessions at Washington, and their visits to other cities, they no doubt found enough of disappointed speculators to fill their willing ears with tales of their own wrongs, and the frauds of rival dealers. What may be the judgment of this Commission, after a session of five months, it is only permitted us to guess, but there is no reason to expect that it will be favorable. Already a portion of the public press, ever ready to bay from afar at the bark of a prominent man, is attempting to prejudice the public mind by circulating vague defamation.

In the midst of these investigations, as if to prevent the possibility of interference or explanation, the Surgeon-General was despatched to the South Atlantic and Gulf Coasts, the Mississippi River, and the Cumberland, ostensibly to perform those duties for the sake of which the office of Medical Inspector-General had been created. Surgeon Joseph R. Smith, who had been for thirteen months his principal aid, and was presumed to be familiar with all his official acts, was banished to Little Rock, that he might not give testimony in his favor.

The administration of Dr. Hammond fell in a period of great events and arduous labor. The armies under Gen. McClellan and General Pope claimed a large share of his attention, and often his actual presence, while permission to visit the field of Western operations was denied him. The whole medical service of the United States forces had to be reorganized. The extensive hospitals throughout the entire field of military operations, of which those on the Chesapeake, at Washington, Annapolis, Philadelphia, and New York, may be taken as examples, were to be planned, built, organized, and supplied. Large purchases had to be made on the shortest possible notice, under circumstances which made the promptness of supply as important as the character of the vendor. Be it also remembered that he was often straitened for funds, and several times without a dollar at his command. For, however liberally Congress might appropriate money, none of it was at his immediate disposal. It could only be reached by a complex system of requisitions, liable to be blocked and delayed at every step. Hence, he might sometimes be compelled to order purchases at a disadvantage. That in such a state of things, men would occasionally arise, base enough to attempt to defraud the nation in the quality or the price of their wares, was to be expected—that they sometimes succeeded, is not improbable, although not proved. But this proves neither incompetency nor corruption in General Hammond. On his appointment he found all the mechanism of supply adapted to a peace establishment. Time and leisure were necessary to learn all its details, and discover its defects.

Of those cases at which rumor now mostly points, some were coeval with the war, some were inevitable under existing laws, and others were instantly discovered and corrected by General Hammond. Should the records and correspondence of the Surgeon-General's office at Washington ever be examined, it will be found that vigilance and impartiality presided there. It is known that the most stringent orders were issued to Medical Purveyors in regard to the standing and integrity of the persons with whom they dealt, and the quality and price of supplies. Complaints were met by investigations, and if found just, with quick and decisive remedies. When, in the fall of 1862, malversation was reported in the Purveying depot at Philadelphia, the Inspector-General, and subsequently Medical Inspector Coolidge, were sent with ample powers and instructions to investigate the whole subject of the purchase and issue of supplies. Other investigations were had from time to time as occasions arose.

The orders and reports in these cases are authentic documents for the conduct of the Department. There are numerous instances where positive orders were given not to buy of particular houses, whose prices, or the quality or measure of whose goods was found objectionable; none will be found where patronage was restricted to favorite parties. But in these expositions of errors and frauds by the Surgeon-General, and the chagrin of unsuccessful competition, a multitude of enemies were made, but too eager to testify before any tribunal. Great importance is attached to this element of disaffection, in accounting for the present state of affairs, and almost as much to a feeling of jealousy among some of the old officers of the regular service. It is not to be wondered at, that some of the latter, accustomed to regard length of past service more than present efficiency as constituting the only title to promotion, should feel hurt at seeing a man selected for knowledge of military hygiene, and not past the meridian of life, promoted over their heads, and should therefore endeavor to spread their disaffection like a contagion. It is fully believed that in this way false representations have been made to the Secretary of War, which have preoccupied his mind with an erroneous impression of the facts.

What is proposed, then, is very simple. If Dr. Hammond has not forfeited his right to fill the position for which he had been selected by the President of the United States, he should be reinstated immediately. If, on the other hand, his honesty or competency is questioned, it is due to the President, the Senate, and the People, that this should be made known by the results of a formal procedure, and not from an investigation conducted by a secret, *ex parte*, and anonymous commission. Let the accused have the same hearing as his accusers. Let the examination be as severe and searching as you please, so that it is but fair and open.

Your co-operation, Sir, is respectfully solicited in obtaining this measure of justice. Be the decision what it may, all good men will then accept it without a murmur; and none with a better grace than the Surgeon-General himself. It is important that justice be done to General Hammond; but it is immeasurably more important that the habit of justice be maintained among the American people.

Believing that Surgeon-General Hammond has administered the complicated affairs of the Medical Bureau with a degree of honesty, scientific ability, and success, that should challenge the admiration of Congress, the people, and the medical profession of this and foreign countries, we desire to infuse into our appeal every principle which should actuate those who heartily wish to see a just record made, not only of our National military successes, but of the triumphs in military hygiene, and the highest forms of pure philanthropy.

(SIGNED)

Army Medical Intelligence.

SURGEON-GENERAL'S OFFICE,
WASHINGTON CITY, December 21, 1863. }

1. In consequence of the amount of other duties which he has to perform, Surgeon John F. Hammond, U.S. Army, is hereby relieved from duty, as President of the Army Medical Board, now in session in New York, for the examination of surgeons and assistant-surgeons of colored troops.

In relieving Surgeon Hammond from this responsible duty, the Acting Surgeon-General desires to express his gratification at the manner in which the duty has been performed.

2. The Army Medical Board, now in session at New York city, for the examination of surgeons and assistant-surgeons of colored troops, is hereby dissolved.

3. An Army Medical Board to consist of Surgeon Horace R. Wirtz, U.S. Army, Surgeon Alexander B. Mott, U.S. Vols., and Assistant-Surgeon Havilah M. Sprague, U.S. Army, will assemble in New York city on Monday, Dec. 28th, 1863, for the examination of candidates for the following appointments:—Assistant-Surgeons of U.S. Volunteers, Surgeons and Assistant-Surgeons of colored troops, Contract Physicians and Medical Cadets.

4. Surgeon Horace R. Wirtz, U.S. Army, will report to Surgeon Charles McDougall, U.S. Army, Medical Director, Department of the East, for duty, as President of the Medical Examining Board at New York city, and for such other duties as he may assign him to.

By order of the Acting Surgeon-General,

C. H. CRANE,
Surgeon U.S. Army.

The Army Medical Board, dissolved by the above order, has, up to the date of ceasing operations, examined forty-two candidates. Of this number six withdrew before completion of examination. Six were non-graduates, and consequently were not eligible; three were rejected for physical disqualifications; four were found qualified, and recommended for the appointment of surgeon, have been appointed, and are now on duty. Six were found qualified for appointment as assistant-surgeons; five of whom have been appointed, and are now on duty.

WAR DEPARTMENT, ADJUTANT-GENERAL'S OFFICE, }
Washington, D.C., Dec. 9, 1863.

GENERAL ORDERS, No. 391.—Commanders of Departments are authorized to grant furloughs to enlisted men in the General Hospitals within the limits of their command, upon the approval of the Medical Director or Chief Medical Officer. The number allowed to be absent at one time to be limited to five (5) per cent., and the period not to exceed thirty (30) days, and to be graduated according to the distance of the applicant from his home. The good conduct of the applicant to be made the rule of the Medical Officers in recommending the furloughs.

By order of the Secretary of War:

E. D. TOWNSEND,
Assistant Adjutant-General.

ORDERS, CHANGES, &c.

The following named Officers have had the permission to delay twenty days in rejoining their regiments, extended ten days:

Assistant-Surgeons H. A. Goodale, 21st Michigan Vols.; F. Corfe, 1st Wisconsin Vols.; H. T. Woodruffe, 100th Illinois Vols.; A. J. Lary, 2d East Tennessee Vols.; J. T. Walton, 103d Pennsylvania Vols.; Surgeons J. M. Cook, 24th Ohio Vols.; James K. Brelsford, 74th Ohio Vols.; Asst.-Surgeon O. Nellis, 2d Virginia Cavalry; Surgeons Henry J. Herrick, 17th Ohio Vols.; William B. McGavran, 26th Ohio Vols.; Henry J. Herrick, 17th Ohio Vols. (2d extension); Asst.-Surgeons J. J. Sheldon, 45th Ohio Vols.; H. Griswold, 11th Michigan Vols.; Surgeons Wm. Forrester, 5th Kentucky Vols.; W. F. McCurdy, 57th Pennsylvania Vols.; W. M. Houston, 122d Ohio Vols.; J. W. Whitney, 13th Massachusetts Vols.; Asst.-Surgeon E. M. Howland, 24th Ohio Vols.

The following Medical Officers, recently released as prisoners of war from Richmond, Va., will join their regiments. Permission to delay reporting for twenty days is hereby granted them:—

Assistant-Surgeons D. S. Clark, 25th Illinois Vols.; P. R. Thomba, 89th Illinois Vols.

The leave of absence granted E. W. H. Beck, 3d Indiana Cavalry, in Special Orders No. 223, December 15, 1863, from Headquarters, Cavalry Corps, Army of the Potomac, is hereby extended fifteen days.

The Board convened by Special Orders No. 318, July 15, 1863, from the War Department, "for the Examination of Men at Convalescent Camp, Va., for admission into the Invalid Corps," has been dissolved.

So much of Special Orders No. 502, Nov. 11th, 1863, as honorably discharged Assistant-Surgeon Joseph B. Galer, 31st Wisconsin Vols., has been so amended as to read as follows:—Assistant-Surgeon Joseph B. Galer, 31st Wisconsin Vols., having tendered his resignation, is hereby honorably discharged the service of the United States, on account of physical disability, with condition that he shall receive no final payment until he has satisfied the Pay Department that he is not indebted to the Government.

The following named Officers (published officially Nov. 23, 1863), having failed to appear before the Military Commission, instituted by Special Orders No. 53, current series, from the War Department within the prescribed time, are, by direction of the President, dismissed the service of the United States, to date Nov. 23, 1863, for the causes set opposite their names:—

Surgeon Pascal A. Quinan, 150th Pennsylvania Vols., for absence without proper authority.

The resignations of the following named Officers have been accepted by the President, to take effect from the dates set opposite their respective names:—

Surgeon S. F. Elliott, U.S.V.; Assistant-Surgeon J. K. Binduy, U.S.V.; Hospital Steward J. B. Patterson, U.S.A., have been discharged for incompetency.

Hospital Steward Ferdinand Weiler, 72d New York Vols.; Sergeants Wm. B. Young, 1st Wisconsin Cavalry; and James Mingay, 115th New York Vols.; Privates John A. Rodrigo, 5th New Jersey; Henry E. Daniels, 124th Illinois; Edward S. Fletcher, 13th Massachusetts; Thomas C. Wood, 79th New York; Grove M. Willis, 1st Illinois Artillery; John W. Smith, 121st Ohio; Robert J. Strong, 1st Minnesota; James M. McMasters, 27th Illinois; Lucius Dille, 15th Indiana Battery Light Artillery; and William Gardiner, a substitute for a drafted man, and now Acting Hospital Steward at the Barracks for Drafted Men at Philadelphia, Pa., have been discharged with a view to their enlistment as Hospital Stewards in the Army.

So much of Special Orders No. 518, Nov. 21, 1863, from the War Department, as assigned Assistant-Surgeon Charles H. Hood, U.S.V., to duty in the Department of the South, is hereby revoked; and he will report in person without delay to the Commanding General Department of the Cumberland, for assignment to duty.

Surgeon B. B. Breed, U.S.V., is authorized to delay complying with Special Orders No. 544, December 8, 1863, from the War Department, assigning him to duty in the Department of the Missouri, until he has settled his accounts as Medical Purveyor, Department of North Carolina. Permission to visit Washington for that purpose is granted him.

Act.-Asst.-Surgeon A. H. Smith, U.S.A., has been assigned to Las Cruces, N. M.

Medical News.

DEATH OF DR. H. G. OLMSTEAD.—At a meeting of the Bellevue Medical Union, the following resolutions were unanimously adopted—

Whereas, It has pleased Providence to remove from our midst by pestilential disease our late friend and colleague Dr. H. G. Olmstead; therefore, Resolved, 1st. That while we deeply regret the death of our colleague, we can yet rejoice that he died bravely at his post, in the performance of his professional duties; furnishing a noble example of the neglect of personal safety, while endeavoring to save others.

2d. That in the death of Dr. Olmstead, we have to lament a pleasant companion, a sincere friend, and an accomplished physician.

3d. That we most deeply sympathize with Dr. Olmstead's relatives in their present great affliction.

4th. That these resolutions be printed in the American Medical Times, and a copy be sent to the friends of deceased.

FRANCIS DELAFIELD, }
W. SOUTHWORTH, JR. } COMMITTEE.
J. W. LYON.

DEATH OF DR. MORTIMER F. PORTER.—At a regular meeting of the Obstetrical Section of the Academy of Medicine held last evening, it was voted that a copy of the following testimonial, which received the hearty approbation of all the members, be transmitted to THE AMERICAN MEDICAL TIMES for publication:—

Whereas our late associate, MORTIMER F. PORTER, M.D., has been removed by death, we, the members of the Obstetrical Section of the Academy of Medicine, hereby express to his family and friends our sympathy with them in their bereavement, and our sorrow for his early loss; and whereas, as Secretary of the Section for nearly four years past, he has most creditably and faithfully fulfilled his duties, for his moral worth, his public usefulness, and his professional attainments, we hereby put on record this evidence of our high and sincere respect.

It is proper to add that several members spoke most kindly and feelingly of the Doctor; and by all his memory will be long and faithfully cherished.

NEW YORK, Dec. 22d, 1863.

Original Lectures.

AMPUTATIONS IN GUNSHOT FRACTURES OF THE FEMUR;

BEING REMARKS MADE AT THE MEETING OF
THE SURGICAL SECTION OF THE N.Y. ACADEMY OF MEDICINE

Held Nov. 28, 1863.

By FRANK H. HAMILTON, M.D.,

PROF. OF MILITARY SURGERY AND FRACTURES AT BELLEVUE HOSP. MED.
COLLEGE, AND LONG ISLAND COLLEGE HOSPITAL; SURGEON
TO BELLEVUE HOSPITAL; LATE MEDICAL INSPECTOR, U.S.A.

LECTURE I—PART II.

Case 58.—Richard Merx, Corporal, 20th N.Y. Vols., was wounded at Fredericksburg, Va., May 4, 1863, by a ball which entered on the left side of the left thigh, and passed out through the groin, traversing in its course the trochanter major. Seven months after, when I saw this man, the wound was still discharging moderately, and several very small fragments of bone had escaped from time to time, which evidently came from the trochanter. The trochanter was comminuted, I think, as it is now much expanded; but the limb was probably never shortened, indeed there was never a complete separation of the shaft.

Case 5.—Henry Voger, private, 20th Mass. Vols., was wounded June 30, 1862, at White Oak Swamp, V., by a ball which entered the lower part of the femur, near the joint, in front, but it did not pass through, and has never been found. It probably remains in the bone. Three months after I saw the patient, and learned that only moderate inflammation had followed the injury, yet the knee was ankylosed, and the adjacent tissues somewhat thickened. The discharge of matter had ceased.

This was also a case of "perforation," the shaft of the bone not having been completely separated. My impression is that the ball entered just above the epiphysis, and probably it was not broken through into the joint.

Case 54.—Sergeant Louis Morell, æt. 19, 119th N. Y. Vols., was wounded by a ball which entered on the outside of the left leg, within one inch of the joint (capsule), and passed upwards and forwards emerging in front, but not entering the capsule of the joint. I saw this man four months after the injury. The wound still continued to discharge pus. Two small fragments of bone escaped on the tenth day. The leg is flexed upon the thigh at an acute angle, and fixed. He sits up and eats well, and no doubt will recover completely.

This was an example in which the ball merely made a groove in the side of the bone.

FRACTURES OF ARCH OF FEMUR.

Case 13.—James T. Cone, Private, 7th Va. (Rebel) was wounded, Sept. 17, 1862, by a musket-ball at Antietam. I saw him in the General Hospital at Boonsboro, Md., twenty-four days after the accident. The ball had entered on the back of the right thigh, penetrating the arch of the femur. No splint had ever been applied. The limb was shortened and everted, and there was a very copious discharge of pus from the wound. The ball was never found. The prospects for his recovery were not very good.

Case 38.—Lieut. G., 4th Minn., wounded by a rifle ball, Sept. 19, 1862, at battle of Iuka. Ball entered just back of the right trochanter major, breaking the arch of the femur, and has not been found.

I saw this officer in the City General Hospital at St. Louis, six months after the occurrence, at which time the limb was much everted and shortened, and the wound continued open. His general condition was not good, yet such as to warrant some encouragement of his final recovery.

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Case 56.—James Vanderbeck, wounded at battle of Chancellorsville, May 4, 1863, by a ball which entered near the left trochanter major, and emerged in front, below Poupart's ligament. He was eleven days in the hands of the enemy, during which time he was urged to submit to an amputation at the hip-joint.

He is now in the Fifty-first Street Hospital in this city. He says the wound had closed entirely within three months after he received the injury. No fragments of bone ever escaped. He is now perfectly well, but the leg is shortened an inch and a half, and everted. He cannot walk without crutches.

RELATIVE RESULTS WHEN BONE IS MUCH COMMINUTED.

Cases 29 to 35 inclusive (seven cases) were all under the charge of Surgeon Finley, in charge of the Field Hospital at Murfreesboro, Tenn. They were all wounded by balls at the battle of Stone's River. My notes were taken four months after the wounds were received. Three were in the middle third and four in the lower third of the shaft. All had united; in three the suppuration had entirely ceased, in two it had nearly ceased, and in two it was still copious. In not one of these seven cases did any fragments of bone ever escape.

Dr. Finley reported to me, however, six other cases in which fragments of bone did escape during the treatment, and they all died.

I have in my records several cases in which fragments of bone have escaped during the treatment, and yet the patients have recovered; but the majority of such examples end in death.

There are many other cases of which I have made very full notes, but I do not feel at liberty to occupy the time by relating them in detail.

Original Communications.

INVESTIGATIONS UPON THE NATURE AND EXCITING CAUSES OF ASTHMA

REPORT OF NINE CASES, AND TWO OF DYSPŒA RESEMBLING ASTHMA.

By D. D. HANSON, M.D., NEW YORK.

THERE must necessarily be great contrariety of opinion in regard to the pathology and etiology of a disease like asthma, which seldom terminates fatally, or leaves appreciable traces of its inroads upon the tissue it invades. Thus Sauvages says: "Asthma est morbus chronicus, ejus præcipuum symptoma est periodicè recurrens spirandi difficultas. Dispnoea est difficultas spirandi, unum symptoma, et non morbus." Dr. Dulcas (of Tours) quotes this negative definition, and with some ingenuity completes it by the positive assertion that a herpetic diathesis exists in all cases of true asthma, and that an irritation of this character reflected upon the mucous membranes of the bronchial tubes is the "morbus," or in other words, asthma is a writhing of the bronchial muscles under the flagellation of herpes. He then describes the evanescent type of these eruptions as witnessed in urticaria, and aptly traces its striking analogy to those ephemeral shades of asthma usually considered nervous. Analysing erythema in like manner, he finds its analogue in the more permanent and aggravating forms which he considers a grade intermediate from the first, and another variety which is persistent and attended with copious mucous secretion. This last form of asthma he considers eczemic. He concludes his remarks on the pathology of asthma thus: "If the preceding reflections are true, and to my mind they are incontestable, it is not in the nervous element, or in other words, an unknown one, that the cause of the periodicity of these attacks of asthma, and the intermission of its dyspnoea, are to be found. The dyspnoea is intermittent because the herpetic eruptions are naturally

intermittent and periodic." Again he adds: "Let us resume all these considerations in repeating; asthma is an acute herpetic affection of the respiratory passages." Of the nervous idea, M. Dulcos says: "The more I advance in the practice of medicine, the more my disbelief in neurosis increases; so frequently the phrase, nervous accidents, is only an expression to conceal our ignorance." Therapeutically, he finds corroboration of his views in the remarkable effects of sulphur in two cases, though he admits its failure in others.

Turning from the humoral idea of the nature of asthma, we find the more modern one, of its nervous character, pretty generally accepted by the profession of the present day. Cullen places asthma in the class neurosis of his nosology. Trousseau, in alluding to the herpetic idea advanced by his pupil, says: "Dr. Dulcos (of Tours) has proved that there is a herpetic diathesis in almost all asthmatics. I have also observed the same fact. * * * This theory of M. Dulcos explains, to a certain extent, the fantastic form of this species of asthma; but it does not afford an explanation of the intermissions and remissions of the dyspnoea, which still have to be accounted for on the supposition of its nervous origin." Dr. Salter amplifies the nervous theory of asthma at great length, and announces it to be the object of his monograph to prove "that asthma is essentially, and with the exception perhaps of a single class of cases (the humoral) exclusively a nervous disease: that the nervous system is the seat of the essential pathological condition." Considering the subject analytically he continues: "The purpose of the muscular furniture of the bronchial tubes is, that they shall contract under certain circumstances, and on the application of certain stimuli; and seen from this light, *we recognize in asthma merely a morbid activity—an excess of this natural endowment. The tubes fall into a state of contraction with a proneness that is morbid; the slightest thing will throw them into a spasm, the irritability of the muscle is exalted, the contractions violent, and continued, that becomes a stimulus to contraction which should not be, and the nervous and muscular system is brought within range of courses of irritation applied to distant parts as ordinarily in no way to affect them.*" After alluding to the trifling asthmatic phenomena which are strictly physiological compared with the same manifestations which are undoubtedly morbid, he continues: "In what then does the peculiarity of the asthmatic consist? Manifestly in a tendency in the musculo-nervous system of the bronchial tubes to be thrown into a state of activity; the stimulus may be either immediately or remotely applied, but, in either case, would not normally be attended by such a result. There is no peculiarity of the stimulus * * * *nor probably is there any peculiarity in the irritability of the bronchial muscles; the peculiarity is confined to the link which connects the two—the nervous system,*" &c. Here we learn the important fact 'that we recognise in asthma a morbid exaltation of the irritability of the bronchial muscles, by which the bronchial tubes fall into a state of spastic contraction from those slightest things which should not produce such results,' yet there probably is no such morbid irritability of the bronchial muscles, the peculiar state existing in the nervous system." Dr. Salter adds the following reflection: "These considerations tend, I think, to rationalize our notions of asthma, and impart an interest and order to its phenomena."

I have quoted sufficient from the text of each author to give a synopsis of their respective notions of the nature and origin of asthma, and these quotations will be found to be from the ablest and fullest expositions of the humoral and nervous theories of this disease extant. The absurdity, contradiction, and obscurity involved in each are sufficiently manifest, but the antagonism between them is only apparent. M. Dulcos and Dr. Salter may both be right according to the restrictions of their respective definitions, or they may both be wrong. The one sets aside all those cases of dyspnoea excited by remote lesions, visceral engorgement, repletion, and inflammatory thickenings of the mucous membranes of the bronchial tubes, as unworthy of the name

of asthma. The other passes over all those cases of supposed humoral origin without extended comment. Both are disinclined to consider those phenomena which are inexplicable by their peculiar hypothesis. The distinctive and essential character of asthma is thus lost sight of by both. What we want is, to get at that peculiar pathogenesis by which asthma can be viewed in its individuality, disrobed of all its accidental associations and complications. To say with M. Dulcos "that asthma is an acute herpetic affection of the mucous membranes of the bronchial tubes," or with Dr. Salter, that it is "essentially nervous" with an important exception, does not reach the case. Asthma is not an irritation of a membrane, nor is it nervousness, nor is it, simply, dyspnoea; it is a peculiar kind of difficult respiration resulting from spasm of the bronchial muscles. Dyspnoea without spastic action of these particular muscles is not asthma. M. Dulcos, then, confounds the disease with its *occasional* exciting cause. I say *occasional*, because every practitioner has witnessed precisely such phenomena as that described by M. Dulcos as "herpetic irritation of the bronchial mucous membranes," without the least trace of asthmatic dyspnoea.

It remains, therefore, to find a rational explanation of the nature and essential elements of this distressing disease, and we have only to analyse the phenomena of spasm, and see what organs and tissues are engaged in its production, to arrive at a demonstrative truth. It being conceded that asthma is a prolonged contraction of a particular class of muscles, we have the whole facts before us, and the question is not what produces, or is the cause of the spasm, but what is the spasm itself? Is it a muscular, nervous, or musculo-nervous phenomenon? That spasm, in itself considered, independent of its exciting cause, is simply a muscular phenomenon, is self-evident, as no other tissue has the inherent elements of contraction, and spasm is purely a prolonged and excessive contraction. If spasm, then, is an abnormal contraction of the muscles, and asthma is a spasm of a particular class of muscles, what further evidence is needed to demonstrate the entire and exclusive muscular character of the disease? Dr. Salter, indeed, in the very paragraph in which he attempts to demonstrate "that the nervous system is the seat of the essential pathological condition," with great force and perspicuity declares that the normal irritability of the bronchial "muscles is exalted," so that "the tubes fall into a state of contraction with a proneness that is morbid," therefore, "the slightest thing will throw them into a spasm, * * * that becomes a stimulus to contraction, which should not be," etc. Here we have the evidence that the asthmatic dyscrasia has its seat in the bronchial muscles, and that it needs only the "slightest thing" to give it the form of actual disease. Dr. Salter's subsequent assertion, that "the peculiar asthmatic condition does not probably exist in the bronchial muscles," is simply a contradiction of himself, and a launching off from a safe pathology upon a trackless sea of conjecture. When he asserts that the "essential pathological condition" of asthma has its seat in the nervous system, he ignores the elementary principles of neurosis. The functions of the nerves are simply that of viaducts of communication between the brain and remote parts of the body. Disease of these electrodes can have no other effect than to subvert their conducting power, and thereby render communication imperfect and interrupted. Paralysis would result from such lesion, and not spasm. Palsy, partial or total, of a limb from inflammation of its principal nerve, loss or derangement of sight from disease of the optic, of smell from catarrhal lesions of the olfactory, are familiar examples. Spasm, then, is a muscular phenomenon, and paralysis, nervous. That asthma is excited by remote disorders is proof of a normal condition of the nerves instead of lesion. It is the office of the nerves to give warning to the brain of any source of systemic danger, and spread alarm to all parts of the body on its intrusion; and that they report in this manner the "slightest thing," is the highest proof

of their perfect health. The spasmodic action of the bronchial muscles, on the other hand, from "sources of irritation applied to distant parts, as ordinarily in no way to affect them," points out in these tissues the most obvious departure from the normal condition.

But it is upon the supposition of the muscular origin of asthma that a rational explanation of the remissions and intermissions of its dyspnoea can be reached. All muscular activity is followed by exhaustion, more or less complete, in proportion as it is short or prolonged, moderate or excessive. Such exhaustion is followed by relaxation, and remission of asthmatic dyspnoea may result from partial, and intermission from complete relaxation.

The analogy of the asthmatic dyscrasia of the bronchial muscles, and rheumatic phenomena in other parts of the muscular tissue, has long since been pointed out by elose observers. Take, for example, rheumatic irritation of the heart; trifling influences, as mental emotions, a chill, quick exercise, fatigue, vascular repletion, engorgement of the digestive organs, meteorological changes, remote sources of irritation, etc., produce dyspnoea in the asthmatic, and palpitation in rheumatism. This supposition is strengthened by the fact that some of the most efficient medicines in rheumatism are equally efficient in asthma.

There can, however, be no conclusion so demonstrative as those drawn from clinical observations, and the following cases, copied from my note-books as entered at the commencement and during treatment, will illustrate, in part, the essential elements and habitation of the asthmatic condition, as well as the various sources of irritation that sometimes give it the active form of disease.

CASE I.—R. F. Moore, Norfolk, Conn., blacksmith, aged twenty-five, consulted me for asthma of several years' standing, Jan. 7th, 1857.—Tall and spare, but chest well developed. No abnormal percussion sound, but loud asthmatic râle. Each attack is heralded by coryza, confined at first to the nasal canals, but lately the irritation extends to the bronchia. The membranous excitement commences by a sense of dryness, itching, and violent sneezing, and is usually excited by colds. Dyspnoea soon follows, in a mild form at first, but intensifies as the catarrh extends to the bronchial tubes, and always in proportion to the severity of the membranous inflammation. These attacks continue several days or weeks, according to circumstances, dyspnoea remitting with mitigation of catarrh, and recurring with each exacerbation. Finally the catarrh terminates by free expectoration, and with it the asthma.

CASE II.—Mr. E. M. Dean, Hartford, Conn., tobaccoconist, came under my treatment for asthma of eight years' standing, Oct. 1st, 1861.—Tall, muscular, chest full and capacious. Slight percussion deadness, tenderness, and bronchophony in upper part of right lung. Sibillant and sonorous râle, more abundant in right, but distinct in left side. Throat irritated, uvula relaxed, tonsils enlarged, and studded with caseous matter. Digestive organs normal. Dyspnoea ushered in by precisely the same catarrhal phenomena as in the preceding case, but with fearful intensity and persistence, continuing from early fall to late in the spring. Remissions of catarrhal excitement followed by mitigation of dyspnoea. After settled weather of spring the catarrh disappears, and with it usually the asthma, though a severe cough of an asthmatic character, with free expectoration, lingers later, sometimes inducing general prostration.

CASE III.—Mr. G. M. Williams, Norwich, Conn., æt. 60, consulted me Jan. 4th, 1857, for asthma, of several years' standing. Corpulent; no abnormal percussion sounds, but asthmatic râle loud in all parts of the chest; no trace of membranous excitement, cough, or expectoration. During fall is seized with dyspnoea, but always preceded by a fullness and irritation in stomach, styled torpor of bowels, and other symptoms of engorgement of the digestive organs. He partially loses the appetite, and the tongue takes on a brownish coating. The asthma is mild at first, but increases in severity with the gastric disturbance—the food giving

distress from great distension, and he is finally confined to his room in great wretchedness. Towards spring he begins to get relief, and the summer is a season of health.

CASE IV.—Mr. George A. Smith, Morris, Conn., æt. 50, applied to me Nov. 12th, 1858, for asthma of fifteen years' standing. Corpulent; percussion sounds normal, but the asthmatic rattle full in all parts of the chest. Asthma constant, year in and out, entirely incapacitating him for business; appetite poor, and food occasions irritation in the stomach and distension of the epigastrium, greatly increasing the dyspnoea. The bowels are torpid, the urine scant, and throws down a lateritious deposit. Remission of asthma always follows a decrease of gastric irritation, but quickly recurs upon its increase.

CASE V.—S. Haslam, Jun., New Britain, Conn., consulted me Nov. 11th, 1860, for asthma of two years' standing. Short, spare, and anæmic, but not the slightest traces of functional disorder or lesion, aside from asthmatic dyspnoea and râle. Attacks occur after a day of rest, as after Sundays, he being roused from his sleep near morning, on Mondays, with a smart attack. Dyspnoea continued without sufficient remissions to allow of sleep or exercise for thirty-six or forty-eight hours. The spasm finally relaxes, followed by a slight expectoration and quiet sleep, and he goes about his business in health until the next day of rest.

CASE VI.—Mr. James Hunter, New Britain, Conn., comes under treatment for asthma of twelve years' standing, Dec. 25th, 1860. Stout and muscular, and presents the highest type of health and endurance during intervals of attack. After a hard day's labor, which gives him unusual fatigue, he is roused from his sleep with a suffocating dyspnoea; he bounds to the open window or door for relief, and for two or three days suffers the most suffocating dyspnoea, with trifling remissions. The attack finally subsides, he expectorates a tough mucus, sleeps quietly, and wakes in perfect health. These attacks occur once in one, two, or three weeks, according to circumstances.

CASE VII.—Theron Merrill, New Hartford, Conn., æt. 20, consulted me April 1st, 1859, for asthma of two years' standing. Frail and anæmic; chest contracted, but perfectly free from functional disorder or membranous lesion. No abnormal percussion sound, but faint asthmatic râle. Dyspnoea constant, from every fall to summer, but of mild type. Exercise, excitement, and fatigue at all times produce the dyspnoea, but remissions usually follow absence of such exciting causes, unless he takes a severe cold, when the asthma is severe and constant.

CASE VIII.—Mr. George W. Webster, Wolcatville, Conn., æt. 51, tall and emaciated, came under my treatment Aug. 23, 1860, for asthma of long standing. No cough or catarrhal irritation. Asthma commences middle of August, continuing till midwinter, when he is well until early spring; he is then attacked again, and does not recover till May or June. During these periods asthma is constant, or at least the intermissions are broken by exercise, so he is confined pretty constantly to his room, and at night to his chair for sleep. He loses the appetite, emaciates, and the system is prostrated. The asthma terminates without expectoration; the asthmatic wheezing and rattle are the only abnormal pulmonary sounds.

CASE IX.—Mrs. Cornelius V., Jun., Hartford, Conn., came under my treatment for asthma of two years' standing, May 26th, 1859. Short and obese; dyspnoea constant, from the most trivial incident, emotion, exercise, or atmospheric change. During the night the sleep is abruptly broken, and she rushes frantically to the open window to assuage her suffocation. From colds she has long and severe attacks, lasting several days, or weeks even, confining her to her chamber and to her chair. She has visited Texas, Cuba, and California, but gets no relief. No cough, or irritation of the respiratory passages, or expectoration, unless from colds. At these periods there is a trifling asthmatic cough and bronchophony, but it soon disappears. Râle asthmatic loud and full.

In these nine cases we find two classes of asthma, or rather two stages of development. In the five first it is inchoate; it requires a co-existing organic or functional disorder to impart a stimulus for its active manifestations. In the four last cases its development is complete; it is capable of overpowering the system, independent of adventitious aid, and without extraordinary surrounding excitants. In the two first, an entirely dissimilar disease is necessary to arouse the asthma, and they furnish excellent examples of M. Dalcos's "herpes." The third and fourth cases are examples of a numerous class of asthmatics where the dyspnoea is excited by engorgement and irritation of the digestive organs. In the fifth case we have vascular repletion as excitant to spasm of the bronchial muscles. Mr. H. takes his usual rations on Sundays, but does not deplete the system by exercise. The four last cases furnish good illustration of that class of cases usually considered "nervous." Yet in what do they differ from the first two, which are manifestly what M. Dalcos would call "humoral." The phenomenon of asthma is the same in both; the difference being simply, that in the one the asthmatic dyscrasia is so strong that spasm sets in from trivial influences, while in the other the intervention of a stimulus from a dissimilar disease is necessary to bring the bronchial muscles within the sphere of such influences.

CASE X.—Mrs. Nathan W. P., Wolcatville, Conn., applied by letter for treatment, Sept. 15, 1860, for asthma, which had affected her from girlhood. Being a daughter of Mr. Webster, and supposing her case similar, I sent her similar recipes, but getting but partial relief she consulted me personally. Stout and obese; dyspnoea excited by exercise, fatigue, and excitement, or strong emotions, and is obliged always to sleep with the head bolstered; no cough, or irritation of the respiratory passages, or abnormal sound in the lungs; respiratory murmur faint in left lung but normal in right; pulse 100, full and jerking; rhythm of the heart perfect, but its ictus gives a metallic ring, audible in all parts of the chest.

CASE XI.—Mrs. Israel J., Salem, Conn., æt. 43, came to me December 4th, 1860, for distressing dyspnoea. Is obliged to sit erect in bed during the whole night. Ascending a flight of stairs produces the most painful respiratory agitation; the eyes are wild and anxious, the lips purple, and head giddy; twenty minutes lulls this tumult, so she can converse. Pulse 100 to 110, full and harsh; heart's rhythm perfect, but its sounds are metallic, deep, and muffled; bowels torpid, urine scant, and deposits copious, late-ritious and albuminous sediment; stomach distended, so as to prevent hooking the dress, which greatly increases the dyspnoea; percussion deadness over both sides of chest, and murmur inaudible; no bronchophony or asthmatic rale, cough, or membranous irritation. Menorrhagia, with hypertrophy of womb.

In these two cases we have some asthmatic features which give them interest in this connexion, but the asthmatic element is wanting. The irritation is in the muscles of the vascular system, not in those of the bronchial tubes. Mrs. T. was permanently cured by anodynes and sedatives associated with tonics. Mrs. J. was promptly relieved by the same treatment, but soon leaving town I lost sight of her.

In regard to the treatment of the asthmatic cases before described, a rational course was directed to answer the indications presented by the peculiarities and complications of each case. In the two first cases, the catarrh was attacked vigorously at the first appearance of its incipient symptoms. In the third and fourth cases, the engorgement and irritation of the digestive organs were removed, and the diet carefully regulated. Mr. Haslam was ordered a generous diet during the week, but a very abstemious one on Sundays. In the four following cases, the anæmia and debility were corrected with iron and quinia. The dyspnoea, or, rather, the irritation of the bronchial muscles, was treated on the same principles in each case. Chloroform, eth. sul., liq. ammo., &c., variously combined with the con-

centrated tinctures of stramonium, hyosciamus, conium, lobelia, &c., were directed four or five times a day by inhalation; or, where a more stimulating and deobstruent impression was desirable, the tinctures of various essential oils, as cedar, hemlock, cajuput, origanum, sassafras, &c., were substituted for the narcotics. Some alternative, as hyd. potas., sulphur, or soda, was directed three times a day, to be continued two to four months.

The result of this treatment leaves little to be desired. With the exception of the second, fourth, and eighth cases, the cure was complete and permanent. The majority did not have an attack after commencing treatment. This was the case with Mr. Moore, Mr. Hunter, and Mr. Merrill. Mr. Williams did not have an attack for three years, and then found immediate relief from his inhalant, and has been well since. Mr. Haslam has had two or three mild attacks, but none that has interrupted his business, or that do not yield readily to treatment. Mrs. V. has been perfectly healthy the last two years, very seldom resorting to the inhalant. Mr. Dean obtained most immediate relief, and has had but two attacks since commencing treatment, both of which yielded readily. One of these occurred in August last, and he was advised to spend the winter in St. Paul, which he did with *entire freedom from asthma, though he had one of the severest attacks of catarrh of his whole experience.* Mr. Webster has an occasional attack, but controls it, as far as I am informed, so as to suffer no interruption of business. I think he did not have an attack for the first year after commencing treatment.

I have many other equally interesting cases, showing still other phases and complications of asthma, but as I have already exceeded my limits, they must be omitted.

GUNSHOT WOUND OF ABDOMEN.

By CHAS. H. RAWSON, M.D.,

OF DES MOINES, IOWA.

THE following case is one of some interest, showing what nature will do towards prolonging life. August 5th, was sent for in haste to go eight miles into the country, to see Christopher Howard, who had been stabbed in an affray with a neighbor. I arrived three hours after the injury, and found a wound on the left side, commencing a half inch from the median line of abdomen, and one and a half above Poupart's ligament, running upwards and outwards four and a half inches, and penetrating completely through, so that the bowels protruded when he was carried to the house. The intestines were replaced, however, before my arrival. From personal examination, and report of those who assisted in replacing the bowels, I concluded the intestines could not have been wounded, though the omentum was dark and congested, and had been slightly cut or torn.

I brought the wound together with several interrupted sutures and adhesive plaster, and applied cold water as a dressing.

Thinking it not desirable to disturb the bowels with a cathartic, I put him under the influence of opium, sufficient to keep the bowels quiet, and relieve him from all restlessness, and kept him on beef tea or fluids exclusively. Everything progressed favorably up to the ninth day, no constitutional disturbance indicating there was extravasation of feculent matter, or inflammation of peritoneum. The external wound had healed by first intention, except the outer angle for half an inch. On the morning of the ninth day, very unexpectedly, fæces began to pass from the small opening; portions of undigested corn, and blackberry seeds eaten the day of the injury, now came away with other material. As the bowels had not been moved since the injury, I now thought it advisable to unload the lower portion, and give room for that above to pass down if so inclined. I ordered an enema, and superintended its administration, and before half a pint had been thrown up it began to pour out of the opening above, showing the descending colon to be wounded.

With this state of affairs there were no constitutional symptoms indicating infiltration into the peritoneum.

Still I thought it best to keep him fully under the influence of opium, so as to perfectly control the bowels, giving nothing but fluids for nourishment, and trust to nature. In three weeks the external wound healed by granulation, and without an unfavorable constitutional symptom from the beginning.

The wound was inflicted with a large jack-knife, of not very sharp-pointed blade. I think the outer coats of the colon must have been divided at the time of the injury, and the mucous coat must have given way afterwards, allowing the contents to pass out, but during the nine days nature had prepared the parts by adhesion, so that no extravasation into the peritoneum took place, thus saving life.

Reports of Hospitals.

BELLEVUE HOSPITAL.

CASE OF PERITONITIS

FROM PERFORATION OF THE GALL-BLADDER.

By GEORGE ENGS, M.D., SEN. ASSISTANT.

JAMES MORRIS, æt. 30, born in Ireland, a tailor, was admitted to the Hospital, in the service of S. Austin Flint, on Friday, Nov. 27th, 1863. He stated that he had been of intemperate habits, but that his general health had been good, until Wednesday, the 25th Nov., when, while at work in the morning, he was seized with a sharp pain in the epigastrium. He kept at work for about an hour, until with the increase of the pain, which gradually extended down the abdomen, he was obliged to take to his bed. On Thursday vomiting took place, and was repeated during the day and night, whenever food or drink was taken. The pain had been constant since its first accession; the bowels had moved daily, with thin and watery dejections. On admission to the hospital the patient's countenance was pale and anxious, his nostrils dilated, and upper lip raised. The tongue was coated and yellow; pulse 120, small; respiration 36, and costal; decubitus dorsal, with the knees drawn up. He complained of constant but not very severe pain over the whole abdomen. The abdominal walls were rigid, tympanitic, and sensitive to pressure. Coughing gave severe pain. The urine was scanty and of high color.

Treatment.—Magendie's solution of morphia was ordered in sufficient quantities to produce freedom from pain; turpentine stupes to the abdomen, with a diet of essence of beef; milk and stimulus according to the pulse.

The following is a tabular statement of the treatment by morphia:—

TIME.	PULSE.	RESP.	MAGENDIE'S SOLUTION MORPH.	REMARKS.
Nov. 27th, 1 1/2 P.M.	120	36	gtt. xv.	
" 5 "	123	36	" xv.	
" 7 1/2 "	108	28	" x.	Complaints of nausea.
" 12 M.	108	20	" xx.	No pain except on motion
Nov. 28th, 2 A.M.	100	17	" xv.	Restless.
" 6 "	100	11	" x.	Has vomited.
" 9 "	102	10	" v.	Dozing.
" 11 1/2 "	106	12	" x.	No pain.
" 1 1/2 P.M.	162	12	" v.	
" 4 1/2 "	104	10	" 0	No pain.
" 6 "	100	11	" 0	Vomiting repeated.
" 9 "	92	9	" 0	Asleep.
" 11 1/2 "	108	18	" v.	Restless.
Nov. 29th, 3 1/2 A.M.	108	25	" xv.	Restless; Thin yellowish stool.
" 8 "	100	18	" v.	
" 10 "	88	9	" 0	Rigidity of abdomen much diminished.
" 1 P.M.	90	13	" iv.	
" 4 "	90	13	" v.	
" 7 "	106	14	" vi.	Bowels again moved.

Monday, Nov. 30th.—Pulse 84; respiration 16. There have been bloody discharges from the bowels during the

night. The abdomen is still somewhat tympanitic, and sensitive to pressure, but much less rigid. He has no pain. Morphia was continued in small quantities during the day. Tuesday, Dec. 1st.—Looks well; dysentery continues; abdomen bears considerable pressure. *Treatment.*—Opium, with sub. carb. bismuth and tr. opii by rectum. Wed., Dec. 2d.—Dysentery the same; pulse 88; abdominal respiration partly restored. Thursday, 3d.—Same. Friday, 4th.—He appears weaker; the stools are frequent, but no longer bloody; pulse 100, and feeble; occasional vomiting. Ordered stimulants and antemetics. Saturday, 5th.—Pulse 104, small and weak; the diarrhœa is not checked, and the stomach rejects nourishment. Sunday, 6th.—Diarrhœa and vomiting continue. He appears to be sinking. Died at 10 P.M.

Upon examination of the body thirty hours after death, the peritoneum lining the intestines and abdominal walls was found to be much congested. Its two surfaces and the intestinal convolutions were agglutinated by lymph. In the neighborhood of the liver the signs of inflammation were more marked; the lymph was in greater abundance, and on separating the agglutinated parts with the finger, a quantity of bile was found in the peritoneal cavity. A careful inspection of the gall-bladder revealed a small quill-sized perforation near its upper portion. This was found to communicate with an abscess in the wall of the sac, which was about three-fourths of an inch in length by half an inch in width. The contents of the abscess were stained with bile, and semi-fluid in consistency. Another abscess of the same size existed near the first, and opened into the inner surface of the gall-bladder by a small ulceration. No gall-stones were found. The mucous coat of the gall-bladder was reddened. Examination of the rectum and adjoining colon showed thickening of the mucous membrane, with numerous small patches of redness and depositions of lymph.

Progress of Medical Science.

PREPARED BY E. H. JANES, M.D.

PUERPERAL SCARLATINA

Is the subject of a paper read before the Dublin Obstetrical Society by DR. HALAHAN, in which he gives a sketch of twenty-five cases, nineteen of whom died, and six recovered. Of the fatal cases, nine were in their first pregnancy; three in their third; two in their fifth; one in her sixth; two in their seventh; and two in their eighth. The presentations were a half breech, a breech and heads. One was delivered by version; one, at least, had scarlatina in her house; three were ill of the disease on admission; one had no sore throat; seven were unmarried. Three died on the second day; one on the third; two on the fourth; six on the fifth; two on the sixth; three on the seventh; one on the eighth; and one on the fifteenth. Only two had rigors, which occurred on the second day. The treatment included anodynes, alteratives, diaphoretics, astringents, tonics, stimulants, cold lotions, and blisters to the shaved head or back of the neck, and in fact all remedies without avail. Of the six who recovered, three were delivered with the forceps; five were in their first, and one in her fifth pregnancy; one was leeches; one was unmarried; the skin desquamated in all. They all had stimulants freely administered. He believes that we are yet far from having arrived at the treatment best calculated to deal with this fearful malady, and strongly advocates, instead of continuing to tread the beaten track of our predecessors, with a mortality of 75 per cent. as the result of our efforts, to give largely and freely, from the very commencement of the disease, *stimulants* in the shape of wine and brandy; and, as a medicine, bark and carbonate of ammonia, unless contra-indicated. The influence that stimulants exert on the

pulse is thus illustrated in one of the fatal cases: On the fifth day the pulse was 130; she got twenty ounces of wine on this and the following day, and the pulse fell to 120. The wine was continued, with very slight diminution, till the eleventh day, when the pulse had fallen to 100. On this day she got but eight ounces, and the pulse immediately rose in frequency, and she died on the fifteenth day. Early resorting to stimulants, he believes, will give nature a better chance of overcoming the disease, and prevent sudden and irrecoverable sinking. He advises the same treatment in cases where the mind is in any way disturbed, as in the case of a woman who has been seduced; or from other causes where the disease is aggravated by a mind distracted by fearful forebodings. To such a patient he gave a pint of wine during the first twenty-four hours after delivery, with the effect of raising and sustaining the nervous system. This treatment, if employed from the first, he says, cannot increase a mortality sufficiently alarming already, but believes will decrease it.

THE SUBCUTANEOUS INJECTION OF QUININE.

The success attending the hypodermic method of administering morphia, atropia, etc., has suggested the same method of employing quinine in the treatment of remittent and intermittent fevers. Dr. W. J. MOORE of the Bombay Medical Service (*Lancet*) claims almost invariable success in thirty cases of intermittents, the case seldom requiring a second application; and remittents subside after the fifth or sixth injection. Dr. Chasseaud, of Smyrna, also reports one hundred and fifty cases, and especially recommends the system where gastric symptoms render the exhibition of quinine by the mouth impracticable. The preparation used is a strong solution composed of thirty grains of quinine, eight or ten drops of dilute sulphuric acid, and half an ounce of water. Of this solution, from half a drachm to a drachm is injected. No other remedies are used except a little sulphate of soda when the bowels are confined, or, when indicated, some of the preparations of iron. Dr. M. generally injects beneath the skin over the outer belly of the triceps extensor muscle, or over the deltoid. He has also injected with equal success on the thigh and calf or over the spleen when there is an enlargement of that organ. The instrument used is a small glass syringe with the screw action, and furnished with a sharp silver point, some half an inch in length. To avoid irritation, it is important that the instrument be perfectly clean, and that none of the alkaloid be left in suspension instead of solution. The best time to inject is shortly before the cold fit, but if done during the first stage it will lessen, and sometimes stop the whole paroxysm. In cases of remittent fever, a good time to commence is during the remission, repeating the operation at intervals of six or eight hours. Dr. M. thinks that four or five grains of quinine injected beneath the skin, are equal in their effects to five or six times that amount taken into the stomach, and that the effects are more certain and relapsing attacks less common.

JOSEPH HENRY GREEN, F.R.S., F.R.C.S.—This distinguished member of the medical profession, of England, died on Sunday evening last, at his residence, The Mount, Hadley, near Barnet, in his seventy-second year.

THE annual public *séance* of the Academy of Medicine has just taken place (Tuesday, Dec. 15th), under the presidency of Baron Larrey. The meeting opened with the usual report on the adjudication of the various prizes, which is always the chief feature of the meeting. This time a portion of the *prix d'Argenteuil* has been adjudicated to an English surgeon, Mr. Henry Thompson, "docteur en chirurgie de Londres." Mr. Thompson seems destined for honor abroad; and the award of the *Argenteuil* prize for his work on Stricture and Diseases of the Bladder, coming so soon after his brilliant success with King Leopold, is almost like regilding fresh-mounted gold.

Reports of Societies.

NEW YORK COUNTY MEDICAL SOCIETY.

REPORT OF COMMITTEE ON SARRACENIA PURPUREA.

(Concluded from page 8.)

J. F. MARSON, Surgeon to the Small-Pox and Vaccination Hospital, London, gives the following report in the *Lancet*, of a trial of the Sarr. purpurea, in fifteen cases:—"I tried the decoction of Sarr., made from the root, by simmering an ounce in one and a half pints of water four hours, until reduced to a pint and a quarter; part was usually given for a dose twice a day, for two days or more. I also gave in some cases the liq. sarraceniae, supplied by Messrs. Savory and Moore, agents of Dr. Miles, in London. In all, fifteen patients have been treated with the sarracenia, selected for their severity, such as I have described, as cases which would not get well under ordinary treatment, namely, malignant cases attended with hæmorrhage from the mucous surfaces; seventy confluent cases with great amount of eruption; and those rather rare and nearly always fatal cases, which are characterized as the corymbose variety. *They have all died.*

"The cases were selected on admission in the early stage of the disease, on account of the severe symptoms manifested, and because I felt it was of no use to try the efficacy of the Sarr. on mild cases or vaccinated cases, which I knew very well would recover without anything being done for them beyond the exhibition of ordinary care, the giving of salines (if required), occasional aperients, suitable diet, etc.

"I cannot say that the Sarr. had any effect whatever. It did not save life; it did not modify in the least the eruption of small-pox; it did not influence any of the secretions; it did seem to act on the bowels in one instance only, and this seeming effect might easily have been from other causes; it did not increase the secretion of urine.

"The particulars of the fifteen cases taken daily at the time of trial of the Sarr. are appended to the report. Two cases were admitted into the hospital that had taken a decoction of the leaves and stems of the Sarr. before admission. The first, a very mild case, having four vaccine cicatrices, was highly modified, I believe, by the vaccination. The second case was confluent, and was wholly modified. They both recovered. The recovery might perhaps by some be attributed to the sarr., but I believe it had nothing to do with it. The vaccinated case was, as I have said, very mild; due, no doubt, to the vaccination. As to the second case, about half our confluent unvaccinated cases recover with ordinary treatment. In conclusion, I may state that had I found the Sarr. do any good, I should have taken an earlier opportunity of reporting the fact to the profession. As it failed, I thought it well to delay this report that others might without bias try the plant during the present epidemic of small-pox, and favor us with their opinion of its reputed power of controlling the course of the disease in its severe forms."

David Godyer, M.D., of Bradford, gives in the *Lancet*, March No., 1863, notes of two cases of variola, treated with *Sarracenia purpurea*; they are as follows:—"L—aged 14 years; never vaccinated. When first seen; (Nov. 15th), the eruption of variola was in the papular stage, thickly spread over the face and extremities, promising confluence; less thickly over the trunk. Previous pyrexia, headache, and bilious vomiting severe. Ordered decoction of Sarr. purpurea, as prescribed by Dr. Miles, in the *Lancet*, Oct. 18th, 1862. The patient was seen daily up to the 21st, the eruption displaying the regular stages without unusual change, and becoming confluent upon the face. The secondary fever was severe, and attended with delirium, but desiccation of the eruption

thereafter proceeded favorably. There was no diuresis; diarrhoea was present from the fourth to the sixth day of the eruption, and was succeeded by constipation, for the relief of which castor oil was ultimately ordered. By Nov. 26th the boy was convalescent. The diet was of diluted milk and farinaceous food throughout.

"B—, aged 3 years; never vaccinated. Was first seen on October 28, when the eruption was papular, just forming in the skin. A diaphoretic mixture had been ordered, which was continued till the morning of the 30th, when the eruption had reached the vesicular stage, the vesicles being full and prominent. The eruption was so thickly spread and universal, and presented such an evident tendency to confluence that it appeared a good case to test the Sarr. purpurea, which was accordingly at once supplied, and given in tablespoonful doses. Oct. 31st.—Considerable febrile disturbance; vesicles becoming pustular; has had the bowels freely moved, and passed a good deal of urine. Nov. 1st.—Child exceedingly restless; cannot be prevented from rubbing its face, and denuding the pustules of their coverings; parts of the face so rubbed are quite raw; those portions which are untouched, as the forehead and the pustules upon the neck and chest, are much flatter than usual, and the skin around them has lost its previous inflammatory blush, and become pale.

"Considering, therefore, the statement in page 430 of the *Lancet*, under the head 'Observations,' that, 'after the second or third dose given at intervals of from four to six hours, the pustules apparently lose their vitality;' and again: 'the pustules appear simply to lose their vitality; they desiccate and fall away;' and further considering that among the alleged salutary effects of the sarracenia, 'rapid diuretic action and power of evacuating the large intestines' are cited; it was believed, notwithstanding the restlessness, that the results of the trial were so far confirmatory of the good effects of the new remedy.

"Nov. 2d.—On visiting the residence of the patient, the child was found to have died late on the previous night."

Query.—To what were the flattening of the pustules and the disappearance of the inflammatory areola due? to retrocession or the sarracenia? The latter got the dangerous and delusive credit assigned to it till it was too late to pour in stimuli to rouse the sinking vital powers.

The mother of this child asserted, that from the moment the first dose of the new medicine was given, the child began to change for the worse.

Thus much for some of the recorded experience in Nova Scotia and England. There have not been as yet in the United States, recorded many observations of the medicinal action of the Sarr. purpurea in small-pox. There have, however, appeared two brief articles in the *AM. MEDICAL TIMES* respecting the trials of this remedy in small-pox. The first was a letter to the editors from Samuel Mitchell, M.D., Cameron Mills, published July 18th, 1863, in which he gives the notes of the following case:—"May 18th, 1863, was called to see W. C., a young man aged 23 years, strong and vigorous constitution; found him with all the premonitory symptoms of variola, the lumbar pains being particularly prominent. He had been exposed to that disease eight or ten days before. Does not remember ever having been vaccinated. Tuesday, 19th.—Fever higher and pain more severe; eruption beginning to appear. I gave him the usual treatment, but without going over all the details of the case, suffice it to say, that on Saturday, the 23d, there was a copious eruption of pustules, about the size of small split peas, diffused over the whole body, particularly on the hands and face—the latter was so swollen as almost to close the eyes, the eruption being so thick, even at this stage, as to look like one great pustule; more or less delirium during the night, and the severe lumbar pains undiminished. It now occurred to me to give the Sarr. purpurea a trial; as it was growing in abundance in a marsh near the house I sent out to procure some of the roots, and directed the nurse to give a teacup, two-thirds

full of the decoction, every four hours. Sunday night, 24th, saw him again; had been delirious the night before, but now calm; pulse slow; skin cool, and many of the pustules shrivelling. From this time the disease never advanced, but all the pustules dried up without maturing. There was no pitting. 'One swallow does not make a summer,' and I would not pretend to claim from this one case that the sarracenia is a specific in this loathsome disease."

The second communication was from G. H. Olmsted, M.D., Physician, Small-Pox Hospital, Blackwell's Island, in which he gives the full notes of a case of the confluent variety treated with the decoction of the Sarr. purpurea for a time; but the symptoms increasing in severity he was compelled to use other remedies in addition, such as stimulants, and anodynes. Notwithstanding the patient died. In conclusion he states, that the sarracenia purpurea was used in three other cases (one of rubcola), but without wearying one with the minutiae, simply says: "the results obtained from it were like those in the case already described, viz. diuresis and diaphoresis. The latter cases recovered, just as they would have done if the remedy had not been administered—there having been no abridgment of the malady."

Your Committee has endeavored to lay before the Society the history and recorded experience thus far in the use of the Sarracenia purpurea for the treatment of small-pox, and in conclusion would respectfully submit the following, as their deductions from the testimony here accumulated. 1st. That the analyses already made of the plant do not give any active principle or elements which would indicate any great medicinal potency. 2d. That the discoverers and advocates of the specific remedial power of the Sarracenia purpurea over variola have given apparently too great credit to the "post hoc" circumstances, as being "propter hoc" influences (one reason for this latter inference being suggested by the loose, unscientific, and eulogistic style of the communications). And 3d. That the reliable recorded experience thus far, appears to preponderate against the remedial efficiency of this plant in those forms of the disease which do not generally recover under the administration of ordinary remedies.

CHARLES HENSCHALL, M.D., *Chairman.*

JOHN G. ADAMS.

A. S. PURDY.

JOSEPH K. MERRITT.

JOSEPH S. CRANE.

Recent Inventions.

THE Graduated Compression Suspensory Bandage is designed for the relief, prevention, and cure of the various diseases connected with or in relation to the spermatic cord, the testes, and the envelopes. The illustrations are half the size of the instrument.

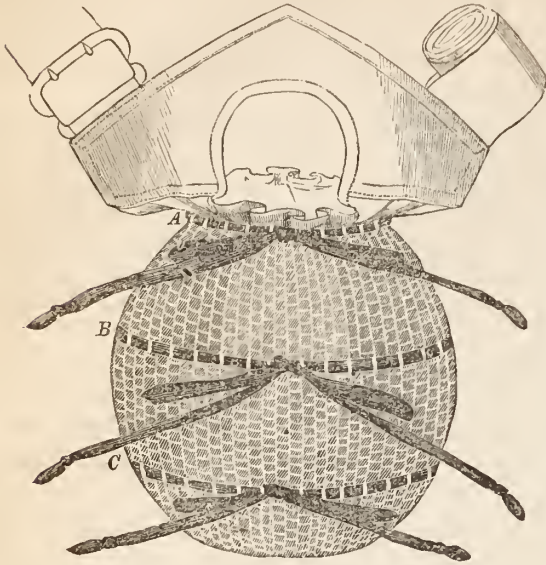
This Bandage, invented by Dr. G. MILIANO, of New York, has been so constructed and arranged as to make equal pressure upon the whole surface of diseased testes and their envelopes.

The pressure can be graduated at the pleasure of the surgeon or the wearer, according to the circumstances of the case, by drawing sufficiently upon the braids so as to contract the bandage and compress the disease; then crossing them at the back of the scrotum, at the perineum, and tying them in front under the penis.

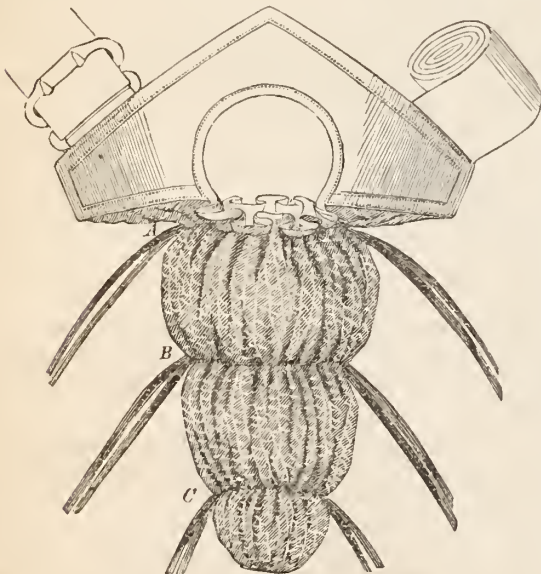
Or, to be more explicit, when the bag has been put on and sufficiently contracted around the scrotum, the superior or uppermost braids (A) must be drawn tightly around the neck of the tumor first and fastened together there, thus confining the entire scrotum within the bag; then the middle and inferior braids (B C) should be drawn and tied.

Without being crossed at the back, as above stated, after

the bag has been closed around the disease, the inferior braids may be fastened across the base of the tumor.



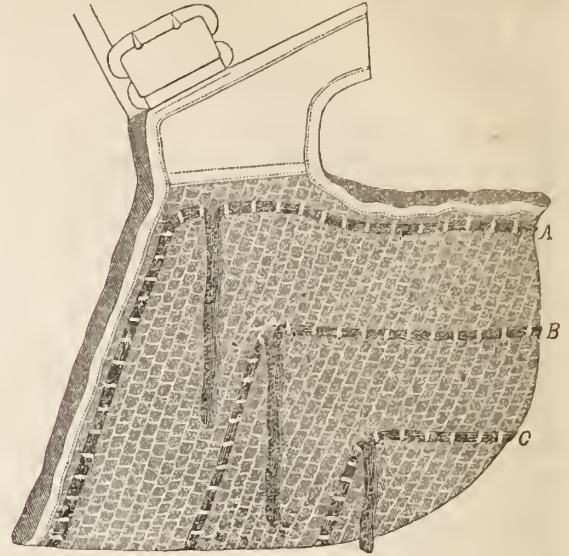
This Bandage, which is made large, light, and strong, is manufactured of linen thread into a net, with silk or linen braids, and without any India-rubber material which would heat the parts disagreeably, lose its elasticity by use, and break in cold weather. It will be seen at a glance, that, by the use of these braids, it can be diminished to a small size; and should it be required at any time to be



made still smaller, as the swelling shrinks before it, it can be readily effected by inclosing a portion of the inferior end of the bag within the two inferior braids, and tying them, which reduces at once its size one-fourth more. It would thus fit any case, however small the tumor may be, and prove false the idea that has been heretofore promulgated, that a certain size bandage is required to fit a particular case in each of the various diseases and inconveniences of the genital organs.

There are many cases in which the superior braids will

be all that are necessary to be used, in order to contract the instrument upon the disease within; in which case the



middle and inferior braids may be taken away without injuring the efficiency of the bandage.

American Medical Times.

SATURDAY, JANUARY 9, 1864.

AN AMBULANCE SYSTEM.

It has frequently been remarked that every branch of our military and naval service is making extraordinary progress towards perfection. The actual existence of war teaches the defects of old systems, and supplies the stimulus for their reform. But there is one defect in our military organization which has become daily more and more apparent, and which, if remedied, would add greatly to the efficiency of every fighting army. Yet every effort at improvement has met with the most determined opposition in high official quarters. We allude to the want of a complete ambulance system. From every battle-field comes up the sickening tale of the suffering of the wounded, who have lain for days where they fall, uncared for, and even unnoticed. The nation stood aghast at the dreadful scenes of the first Bull Run conflict, and a thousand questions were asked as to the possibility of averting the after-horrors of the battle-field. But the same wail of suffering has come up from every subsequent scene of strife, until at length the people seem to have become indifferent to these appeals of their brethren in the army for prompt succor when stricken. A few have labored faithfully, but thus far ineffectually, to obtain a proper organization of an ambulance system for the armies of the United States. Foremost in this noble work have been Surgeon-General HAMMOND, the members of the Sanitary Commission, and the profession of Boston. But as yet they have labored in vain; no amount of argument or persuasion has moved the Commander-in-Chief; he clings to the old system with characteristic tenacity.

In his annual report for 1862 the Surgeon-General urged

the establishment of an ambulance corps in the following decided terms:—

"First among these is the establishment of a permanent hospital and ambulance corps, composed of men especially enlisted for duty in the medical department, and properly officered, who shall be required to perform the duties of nurses in the hospitals, and to attend to the service of the ambulances in the field. By the establishment of this corps several thousand soldiers, now detached as nurses, cooks, &c., would be returned to duty with their regiments, and the expense now incurred by the necessary employment of contract nurses be obviated. A corps formed upon the basis of two men to each company in service, organized into companies of one hundred privates, with one captain, two lieutenants, four sergeants, and eight corporals to each company, would relieve the line of the army from all details for the medical department, and enable the department to render far more efficient service to the sick and wounded than it is capable of affording under the present system. The necessity of such a corps has been recognised by all European armies, and I am able to speak from personal observation of the great advantages to be derived from it."

Meanwhile, one General commanding, GEN. MEADE, has adopted a system first devised under the direction of GEN. McCLELLAN, which has been put to the test in several of the battles of the Army of the Potomac, and has answered its purpose admirably. It has received the cordial sanction of the Surgeon-General, of the Sanitary Commission, and of many who have made this subject a special study. As efforts are about to be made to obtain from the present Congress legislation on this subject, we shall take occasion hereafter to publish the order establishing this organization. The leading features of this plan are presented in the following communication in a daily paper by one familiar with its operation:—

"First, the corps is the unit, and the supreme control of the ambulances, as regards their use, is confided to the Medical Director of the army corps. The ambulances are in the proportion of three to a regiment. Three men are assigned to an ambulance—one driver and two stretcher bearers. This gives nine men to a regiment, who are commanded by a non-commissioned officer, mounted. The above constitutes the regimental ambulance corps, which, consolidated by brigades, are commanded by a Second Lieutenant. The brigades are consolidated into divisions commanded by a First Lieutenant, who consequently has under his command two Second Lieutenants, fifteen Sergeants, and one hundred and thirty-five men. The three divisions consolidated make the corps commanded by a Captain, under the immediate command of the Medical Director. Add to the above one tight medicine wagon (Autenrieth's), and one four-horse supply wagon for each brigade, and you have the full ambulance armament independent of the regimental hospital wagons.

"The ambulances encamp or park by divisions, and where there are efficient officers, the camp is formed equal to an artillery camp as to the order and discipline of the men, the grooming of the horses, and in all the appliances necessary to keep animals and wagons always effective. Minute inspections by the proper officers are made weekly; negligence, slovenliness, or unsoldierly conduct, are punished with the same rigor as in any other arm of the service. The drilling practice of the men is, of course, conducted with a view to their efficiency in their own department.

"When a movement is ordered, the sick are taken up by the train of their respective divisions, the regimental hospital wagons are ordered to join the trains, and thus the whole of the hospital appliances of each division in one compact column, follows close upon its own division, under the command of the Ambulance Officer. Two medical

officers, with steward and nurses, are detailed to accompany the train, and to take charge of the sick in it. Upon halting, hospital tents to the number sufficient to accommodate the sick, are pitched, a hospital is rapidly established, all the aid necessary being rendered by the ambulance corps. The train and hospital are close to the camp of the division. This plan is continued day after day in a protracted march.

"The train, as above stated, follows close upon its division. When a battle is expected, and the division deploys into line, the train halts in the rear. Now comes the most difficult and trying time of handling an ambulance corps effectively. Those who are interested in devising a system of ambulances must not forget in their theories without experience, this critical time; must bear in mind that without competent and tried officers, without men held under the strictest military rule, their finest scheme will prove a failure, at the time when the services of the ambulance corps are most demanded. The plan of handling the ambulance corps in an action I can present to them from experience in all the battles fought since the present ambulance system was adopted.

"In the first place, the stretcher-bearers march with the regiments to which they belong into the action. The Medical Director, with the Captain of the ambulance corps, is with the General commanding the corps at the front. As soon as the positions into which the divisions in battle will be thrown are ascertained, the Medical Director communicates with the Surgeon-in-Chief of division, designating the places where the division hospitals are to be located. These hospitals are composed of the hospital tents in the division, together with a house or barn, if available. The ambulances are drawn up between the hospitals and the division in front, awaiting orders. One officer of the ambulance train is with the Division Commander, one non-commissioned officer with each brigade. The Medical Officers who accompany the regiments into action take position by brigades, in some sheltered location contiguous to their respective brigades. This position is known to the Sergeant watching the brigade, who directs the wounded with stretcher-bearers thither. The ambulances are ordered up to the same place, to take the wounded to the division-hospitals in the rear.

"The officer at division headquarters, as soon as the action begins, orders up the ambulances, and designates the point to which they are to go. He learns from the Medical Director or Corps Officer the various positions and shifting of the troops, and acts accordingly. In this manner the operations of the ambulance corps are conducted throughout the action, and subsequent to it, until all the wounded are removed from the field to the division-hospitals in the rear, where they receive professional and all other treatment necessary."

The writer states, that from more than a year's experience in the hard-fought engagements of this army, he can affirm that he has not known wounded lie on the battlefield two hours after their injuries were received. In one instance he saw over one thousand wounded within the hospitals of our corps, two hours after the battle was over. There is one feature of this plan that must be insisted upon, whatever other details may be introduced, and that is, the ambulance corps must be composed of enlisted men, and must be under the strictest military discipline. No mere civilians can form any part of this corps with safety. The writer above quoted says:—

"I beg to assure men now interested in devising an ambulance system, that any scheme of theirs which will place men in an ambulance corps, not subservient to the strictest military rule, not bound to march as soldiers under fire, with their regiments, will prove a failure. Remove once from officers and men of this corps the conviction that

they are soldiers, bound to share the dangers of their comrades in a fight, and the whole scheme—no matter how perfect in form and organization—will prove a disastrous failure, at the very critical time of battle."

Since writing the above we have seen the bill introduced into the Senate by the Chairman of the Military Committee, which is in its main features a transcript of the order of GEN. MEADE. It is of the utmost importance that this should become a law. The ambulance system of the Army of the Potomac, which has proved so serviceable, will then be extended to every army corps. Humanity and simple justice to those brave men who fall helpless upon the battle-field demand the enactment of this measure. It is a matter that concerns every loyal citizen, but to the medical profession we have a right to make an especial appeal. The efficiency of the Medical Staff in their mission of life-saving depends upon a perfect ambulance system. Let the profession in civil life use their efforts to secure this advantage to their brethren in the army. Petitions should be freely circulated and sent to Congress, and every proper influence should be brought to bear upon individual members. With united effort the bill can be carried through Congress, and when the spring campaign begins, each army corps may have its ambulance corps thoroughly organized.

VENTILATION IN IRON-CLADS.

MONITORS and iron-clad gun-boats have undoubtedly rendered the American navy more formidable than the combined fleets of all other nations. But those hermetically armored engines of war and naval power must be more effectually ventilated, or there will be a fearful and needless sacrifice of human life in the crews that man them. The suggestions made by our Washington correspondent, in this number of the TIMES, demand immediate consideration by the proper officers of the government. We like our correspondent's suggestion, that the *vacuum* or exhaustive method of ventilation be adopted. Why will not that writer seek a temporary release from other duties until he can devise and introduce the very improvement he suggests? We have a naval force of nearly sixty thousand men, and to secure the needed improvements of ventilation in our war-vessels, is sure to *diminish the rates of sickness and invaliding at least twenty-five per cent.* Patriotism and humanity should inspire some mind to undertake this work immediately.

REMOVAL OF SLAUGHTER-HOUSES.

MAYOR GUNTHER begins his administration of our city affairs with the recommendation that the slaughter-houses be removed from the city and island. This is one of the needed reforms in the sanitary police of New York. He says:—

"The establishment of Abattoirs, strongly urged by Mayor Woodhull in 1849, has been recently revived, and I am informed that a company is already prepared to offer a plot in the Ninetcenth Ward to the City to be occupied for the purpose. I am opposed to locating them on the island, as its entire area must, before many years, be required for dwellings, when, if not now, the Abattoirs will be regarded a nuisance. All slaughter-houses must conform to the sanitary regulations of the city, and the occupants' own interest demands that they should not infringe such rules. The many complaints made in former years against the keeping of milch cows and dairies within the City, have

driven them beyond these limits and on the lines of railroad leading thereto. Along those roads and at a suitable distance, locations for the slaughtering of animals and the manufactories connected therewith will be found. An ordinance embodying all that is useful in the construction and regulation of the Parisian Abattoirs, with our abundant supply of water, would secure every needful reform without compelling the City to assume responsibilities best left to individual enterprise."

SANITARY COMPANY OF METROPOLITAN POLICE.

THE Sanitary Squad of the Metropolitan Police are the only really effective health agents of New York. They accomplish more towards the removal of the causes of disease than the entire force of the City Inspector's Department. The Police Commissioners give the following summary of the operations of this Squad of thirty-five men:—

"Uncleanly conditions are the chief sources of disease in a city. There are no laws of hygiene, nor any of the appliances of science that can make a filthy population healthy. The only plan to keep a metropolis healthy is expressed in these words: 'Keep it clean.' The measures of this department executed by the Sanitary Company in the interest of cleanliness and health, are exhibited in the report of the Sanitary Company, from which it appears that 20,942 cases of nuisance have been abated. 20,358 were filthy nuisances; 584 were dangerous nuisances; 20,823 were cleansed by the owners on notice from the department; 119 were cleansed by this department in default of the performance of the duty by the owner."

SMALL-POX IN WASHINGTON.

THE PRESIDENT of the United States has just convalesced from small-pox, but Senator BOWDEN, of Va., has succumbed to this disease. What a humiliating record is this, in the sixty-fourth year of the introduction of vaccination into general practice in this country! Here is a disease the most loathsome, contagious, and fatal in the whole catalogue, prevailing at the national capital so generally, that even the highest officials have become its subjects. This fact is a blot upon our civilization; a stigma of the most disgraceful character. But these fearful lessons will not have been given in vain if they lead to the adoption of proper measures to protect the community from the prevalence of this preventable disease. Washington is but a pest-house where small-pox and typhoid rage with undiminished virulence the year throughout. Congress should at once pass laws establishing an efficient Health Board for the District. A body of physicians and laymen acting in this capacity would soon reform the gross violations of all sanitary laws, and the Capital of the nation would be rendered a proper residence for the members of Government.

CENTRAL PARK HOSPITAL, NEW YORK.

By a recent order of the War Department, Assist. Surg. J. W. S. Gouley, U. S. Army, has been relieved of the charge of this hospital. We have been personally familiar with the affairs of this institution during Dr. Gouley's administration, and cannot let this occasion pass without noticing its management. In all that relates to discipline, cleanliness, economy, and efficiency in the treatment of the sick, he had rendered it a model hospital. During the first six months, there was not a case of death in the hospital, though there was a large number of very sick. The convalescence from severe wounds has always been remarkably rapid. Wasting chronic diseases, as diarrhœa, have

also recovered with but little medication. The grounds surrounding the hospital have been cultivated by the convalescents, thus affording pleasant, healthful, and profitable employment. In no hospital have the sick remained less time, for complete recovery. As at present managed, the Central Park Hospital does honor to the Medical Department of the Army.

Correspondence.

WASHINGTON.

Special Correspondence.

D. C., Dec. 29th, 1863.

THE holidays, and the inactivity of the forces in the field, again permit me to spend a few days in Washington. And I wish to say that from the first battle of the Army of the Potomac until the present day, I have never visited the national Capital and its bureaux of office without being confirmed in the opinion that the plain and unheralded honors and duties of a regimental or hospital Surgeon are far more desirable than any medical office of superior rank and note in the army. As the writer claims no special proficiency in military strategy or tactics, he is incompetent to judge of the merits of questions of military policy; but unless the army surgeon is master of the art of war, and longs to become a ministerial combatant, he certainly will find the happiest and largest sphere of professional activity and patriotic service with the forces in the field, or in the duties of a surgeon in the military general hospitals.

Having watched with peculiar interest the beginning and progress of the systematic and humane enlargement and working of the medical service of the army, the bold and manly policy that broke through all the obstacles that formerly hindered its efficiency, the administrative skill that speedily brought up the several departments of the service to a standard of sufficiency, and which created a system and administration of hospitals hitherto unequalled in any war, we may justly claim that whatever relates to the honor, the success, or the management of the army medical department, most legitimately concerns the entire medical profession of our country. And military surgeons will not cease to thank the editor of the AMERICAN MEDICAL TIMES for his manly and fraternal defence and advocacy of their best professional and official interests and rights.

The good fortune of meeting with intelligent medical officers of the Navy has enabled the writer to compare notes upon important questions, that relate alike to military and to naval hygiene, and to the relative status of medical officers in these two branches of national service. In this letter I will refer only to one or two of the hygienic questions. In a number of the MEDICAL TIMES, some time ago, you rather sharply called attention to the sanitary condition of the *Monitors* and iron-clad gun-boats. The questions to which you then solicited official attention were at that time receiving the earnest and intelligent consideration of the best men in the medical service of the navy. Loyalty to one's country, no less than official loyalty to a department of the war-power, forbids an unauthorized publication of the fearful facts upon this subject, but we hazard nothing in asserting that the *savant* or the mechanical engineer who will devise and put into successful operation a system of ventilation that will supply fresh air to the cabins, quarters, and berth-decks of the *Monitors*, at the rate of from five hundred to one thousand cubic feet per hour, to each man of the ship's company, will confer a priceless boon upon the crews and officers of those new war-vessels, and at the same time will do his country a patriotic service scarcely inferior to that rendered by the renowned ERICSSON himself.

Only think of the sanitary prospects of eighty or a hundred men shut up in a submerged iron encasement, with only about sixty-five cubic feet of air-space to each person, and that sepulchral atmosphere unchanged, except by the very imperfect process of "blowing" a feeble current from the "turret." According to our own rough estimate, each man during battle, or in a sea at all rough, when scuttles and hatches must be closed, would receive *less than two cubic feet per minute* of fresh air for respiration. Add to this the inevitable humidity and the excessive heat and darkness of the *Monitors*, and you have the elemental and inevitable causes of a fearfully high invalid-rate.

Is there no *in-tro-mechanist* who will immediately devise the means for remedying this evil? We venture to offer the clue to the desired invention by saying that the ventilation must be secured upon the *vacuum* principle, or by suction of the foul air, and not by the present inoperative *plenum* or blowing method. Even for the ventilation of ordinary transport ships, the problem of effective ventilation depends mainly upon the means and certainty of *egress of foul air*. No *plenum* blowing in a *Monitor* will ever accomplish the desired result, except at the expense of the invulnerability of the war ship itself. Mr. ERICSSON has provided fans in the *turrets*, but it is not pure fresh air they blow; and even the broken current of the impure air they do control, is sent first down to the hold, then, after feeding the furnace fires, it slowly mixes with the yet impure air of the berth-deck and officers' quarters.

Nothing is plainer than that there must be a specific method and power of *egress* for the foul air, and this fact is so well stated in a brochure just placed in our hands by the Sanitary Commission [*Medical Document S. Hints for the Control of Infectious Diseases in Camps, Transports, and Hospitals*], that we beg leave to quote a paragraph relating to this point:

"The special improvements or works for ventilation in ordinary transports, consist mainly in greatly increasing the area and the places of *egress for foul air*. This is best effected, temporarily, by increasing the area of the windows and air-shafts at the stern, and, if admissible, elsewhere. The *ingress of fresh air* is easily provided for, after establishing the channels and amount of outlet."

After showing how *egress* may be given to the foul air of a ship's decks, the author says that the methods he advises for employment in crowded transports, "will provide 1,000 cubic feet of fresh air per hour to each man, in a vessel sailing five knots an hour; but, if no special outlets are provided, even twice the number of wind-sails, all injecting, would fail even to supply at the rate of 100 cubic feet per hour." But the inventor of the *Monitors* has attempted to ventilate those remarkable gun-boats by the hopeless plan of *blowing* down through the turret, which is like blowing into a bottle through its neck.

In a future communication your readers shall have the results of some observations upon the ventilation of tents and barracks.

BELLUS.

Army Medical Intelligence.

U. S. SANITARY COMMISSION,

TO HIS EXCELLENCY THE PRESIDENT OF THE UNITED STATES.

SIR:—The United States Sanitary Commission authorized by the government to act as a Commission of Inquiry and Advice in respect to the Sanitary interests of the National Forces, have been for more than two years and a half close and careful students of the medical and hygienic affairs of the army. They ought to be, they are thought by the people of the United States to be, they claim to be, better acquainted with the working of the Medical Department, whose deficiencies, mistakes, and necessities, it is

their solemn duty to discover and obviate, than any other responsible body of witnesses. Trusting in their discretion, zeal, and works, the people of the loyal States have made them their almoners, to the extent of seven millions of dollars worth of Sanitary Stores, and a million of dollars in money. The disbursement of this immense charity has brought our agents into close and continual contact with the Medical Department, to whose steady and rapid improvement from the imperfect state in which we found it, to its present degree of surprising and gratifying efficiency, we are able to lend a most indisputable testimony. We attribute this immense improvement to the fact that for two years the Medical Department has been directed by Dr. W. A. Hammond, Surgeon-General; a man known to all impartial and competent judges, as thoroughly scientific, highly endowed, large-minded, and an energetic and controlling administrator. He was selected for his office solely for fitness, and in our calm and deliberate judgment, his administration has more than justified all the high hopes and expectations of those who recommended him for the place.

We hear from sources that do not permit us to doubt the fact, that cautious but systematic efforts are now making to remove Surgeon-General Hammond from office. In the name of some millions of constituents, in the name of the homes of this country, whose solicitude, liberality, and watchfulness, we represent, we respectfully and conscientiously protest against the secret tribunal, and the indirect methods, by which the good fame of the Surgeon-General has been already seriously, and we believe unjustly, aspersed. We protest, in our character of Experts, a body whose business it has been made, to inquire and advise on this very subject, that the removal of Dr. Hammond would be as serious a blow, at the lives, comfort, and efficiency of the army, as the enemy itself could inflict; that the science of the country, the humanity of its homes, and the army itself, would resent it, as a cruel wrong and an alarming error; and we feel ourselves bound, in the interests of the Soldiers in the field, and of those about to enter the service of the country, in the defence of our own principles and convictions, and in the name of the science, the charity, and the fair-mindedness of the Nation, to beg that no further steps in this direction may be taken, without a full and fair trial of Surgeon-General Hammond upon the charges alleged to have been secretly made against him.

Dec. 29, 1863.

Signed { H. W. BELLows,
WM. H. VAN BUREN,
WOLCOTT GIBBS,
GEO. T. STRONG,
C. R. AGNEW,

Standing Committee U. S. Sanitary Commission.

ORDERS, CHANGES, &c.

The following extensions of leave have been granted:
Surgeon A. Crispell, U.S.V., twenty days.
Assistant Surgeon William Spencer, 23d Indiana Vols., ten days.
Surgeon Gustavus A. Bingel, 52d New York Vols., ten days.
Surgeon William H. Lemon, 82d Indiana Vols., ten days.
Surgeon Lucius J. Dixon, 1st Wisconsin Vols., ten days.
Assistant Surgeon A. H. Landis, 35th Ohio Vols., ten days.
Surgeon I. Marcus Rice, 25th Mass. Vols., ten days.
Assistant Surgeon A. C. Mann, 5th R.I. Cavalry, fifteen days.
Assistant Surgeon A. C. Norris, 25th Pa. Vols., twelve days.
Assistant Surgeon W. A. Carmichael, 2d Ohio Vols., ten days.
Assistant Surgeon D. D. Benedict, 17th Ohio Vols., ten days.
Assistant Surgeon Josiah L. Brown, 116th Ohio Vols., ten days.
Assistant Surgeon Samuel E. Holzman, 58th Indiana Vols., twelve days.

Surgeon D. B. Wren, 175th Ohio Vols., ten days.
The following promotions and appointments have been recently made:

Dr. Joel Leavens, of Boston, Mass., to be Assistant Surgeon of Volunteers.

Dr. Theodore Artaud, Act. Assistant Surgeon U.S.A., to be Assistant Surgeon of Volunteers.

Dr. John B. McPherson, of Michigan, to be Surgeon, 19th U.S. Colored Troops.

Dr. Grenville M. Weeks, of New York, to be Surgeon, 3d U.S. Colored Troops.

Dr. John Elderkin, of New York, to be Assistant Surgeon, 10th U.S. Colored Troops.

Dr. Martin Phillips, of Washington, D.C., to be Assistant Surgeon, 22d U.S. Colored Troops.

Dr. John O'Donnell, of Washington, D.C., to be Assistant Surgeon, 9th U.S. Colored Troops.

Dr. Christian Miller, of Washington, D.C., to be Assistant Surgeon, 8th U.S. Colored Troops.

Dr. C. C. Tapliffe, of Massachusetts, to be Assistant Surgeon, 19th U.S. Colored Troops.

Dr. Mills O. Carter, of Massachusetts, to be Assistant Surgeon, 19th U.S. Colored Troops.

To be Hospital Stewards, U.S.A.:—

Private Francois Bruguier of Co. G, 5th Artillery, assigned to Dept. of the Gulf.

Alvin L. Pounstone, of Fayette County, Pa.

Alfred H. Gawler, of Washington, D.C.

Thomas C. Wood, of Baltimore, Md.

August F. Pletzer, of Columbus, Ohio.

Jacob Bolard, of Crawford County, Pa.

Lindsay Jack, of Philadelphia, Pa.

George A. Herbert, of Chester, Pa.

John T. Wilson, of New York.

John P. Zane, of Philadelphia, Pa.

Private Oscar Jacoby, Co. E, 2d Artillery.

Lieutenant Colonel William H. Mussey, Medical Inspector, U.S.A., has been granted permission to visit Washington City.

The following named Hospital Stewards, U.S.A., will proceed without delay to Santa Fe, N.M., and report in person for duty to Surgeon O. M. Bryan, U.S.V., Medical Director:

Thomas Reed, Arthur W. Moore, John C. Russell, A. H. Johnson, Augustus Flynn, John A. Holton, Charles H. Thomas, A. C. Waterman, Charles Enfield, and George S. Boyle.

Surgeon Calvin Skinner, 106th New York Vols., having tendered his resignation, has been honorably discharged the service of the United States.

Medical Cadet John C. Minor, U.S.A., has been relieved from duty in the Army of the Cumberland, and will report in person without delay to the Commanding General, Department of the Susquehanna, for assignment to duty in one of the General Hospitals at Philadelphia, Pa.

So much of Special Orders No. 445, October 5, 1863, as dismissed Surgeon James C. Fisher, U.S.V., from the service of the United States, has been revoked, and he has been reinstated in his former position, with pay from the date of dismissal.

Upon the recommendation of a Board of Officers convened by Special Orders No. 294, July 3, 1863, from the War Department, Surgeon William H. Gominger, 16th Pennsylvania Cavalry, has been honorably discharged the service of the United States.

Surgeon Lewis A. Edwards, U.S.A., in charge of Lovell Hospital, Portsmouth Grove, R.I., has received thirty days leave, on account of ill health.

The Assistant Surgeon-General has ordered the closure of the Lawson General Hospital, at St. Louis, Mo.

Second Assistant Surgeon Albert L. Mitchell, 37th Massachusetts Volunteers, having tendered his resignation while under charges of cowardice, misbehavior in the presence of the enemy, and disobedience of orders, has, by direction of the President, been dishonorably discharged the service of the United States, with loss of all pay and allowances, now due, or that may become due him.

So much of Special Orders 419, current series, from the War Department, as honorably discharged Assistant-Surgeon Alexander Collar, 24th Michigan Vols., on account of physical disability, and for absence without leave, is so amended as to omit the charge of absence without leave.

Hospital Steward Edwin A. Calder, U.S.A., has been honorably discharged the service of the United States, with a view to his acceptance of a commission as 2d Lieutenant 3d Rhode Island Cavalry.

The leave of absence heretofore granted Assistant-Surgeon A. V. Ketchum, 83d New York Vols., has been extended ten days.

Surgeon D. G. Brinton, U.S.V., has been assigned to duty as Medical Director, 11th Army Corps, Army of the Cumberland.

Assistant-Surgeon James Laing has been relieved from duty at the Draft Rendezvous, Bridgeport, Conn., and has resumed his duty at Lowell Hospital, Portsmouth Grove, R.I.

Surgeon G. H. Oliver, U.S.V., has arrived at Santa Fé, N.M., and is waiting assignment.

Dr. N. S. Saxton, of Brooklyn, N. Y., has been appointed Assistant-Surgeon of the 23d regiment U.S. Colored Troops.

Clark Van Deusen, of New Brunswick, N. J., Moses E. Woodard, of Washington, D. C., and Joshua S. Taylor, of Philadelphia, Pa., have been appointed Hospital Stewards, U.S.A.

By Special Orders No. 114, Vicksburg, Miss., issued by Adjutant-General Thomas, December 1, 1863, Surgeon D. O. McCord, 9th Louisiana Vols., of African descent, has been announced as Medical Director and Inspector of Freedmen in camps and on plantations within the Department of the Tennessee and the State of Arkansas. All Medical officers having charge of camps or hospitals for Freedmen will make all their reports and returns through the Medical Director of Freedmen at such times as he may designate, and other regulations that he may prescribe will be promptly complied with, subject to the approval of Colonel John Eaton, Jr., Superintendent of Freedmen. Surgeon McCord, as Medical Director of Freedmen, is empowered to contract with citizen physicians, when necessary, under the same restrictions as the Medical Director of an army corps; to approve "requisitions for hospital supplies," "pay-rolls of hospital attendants," and enforce such orders as will ensure perfect order throughout his Department. This order has no reference to the colored soldiers in the service of the United States, excepting the regiments raised by Colonel Eaton to guard labor of Freedmen in camps and on plantations.

Surgeon Lewis A. Edwards, U.S.A., now in charge of the Lowell General Hospital, at Portsmouth Grove, R. I., is assigned to temporary duty as a member of the Army Retiring Board, now in session at Wilmington, Delaware, to relieve Surgeon Charles Sutherland, U.S.A.

So much of Special Orders No. 431, September 25, 1863, from the War Department, as accepted the resignation of Hospital Chaplain Frederick H. Wines, U.S.A., has been revoked.

Permission to visit Washington city, for the purpose of attending the meeting of the National Academy of Sciences, of which he is a member, is granted Medical Inspector John L. Le Conte, U.S.A.

Original Lectures.

CLINICAL LECTURES

DELIVERED AT THE BELLEVUE HOSPITAL,

By STEPHEN SMITH, M.D.,

PROF. OF PRINCIPLES OF SURGERY IN THE BELLEVUE HOSPITAL MED. COLLEGE.

CONCUSSION OF THE SKULL BONES.

GENTLEMEN:—The treatment of a case has just terminated in the surgical wards, which, though under observation for several months past, presents so many points of interest that I shall occupy your time this morning in a practical review of its more important features. I hold in my hand a considerable portion of the cranium of a patient who during the past seven months has successively run through every phase of symptom consequent on a concussion of the skull-bones, from the first stunning effect of the blow to the final necrosis and separation of the mass which I exhibit to you. It would be tedious, and indeed unconstructive, to repeat the history of the case in great detail, and I shall, therefore, present only those features which may prove most instructive. I have prepared the following abstract from a lengthy and complete history of the case drawn up by Dr. Raphael, House-Surgeon of this division:—

Thomas Lauder, aged thirty-four, single, Englishman, temperate, in the enjoyment of good health, with no hereditary disease, was admitted December 24, 1862. He states that he was struck on the head with the edge of a shovel, which stunned him, and produced a lacerated wound of the scalp, about two inches in length, over the left parietal eminence. He entered the N. Y. Hospital, and after one week's treatment was discharged cured. In a few days, however, intense headache supervened, and the patient applied for admission to this hospital. He was now suffering, according to the record, from severe pain in the head and intermittent delirium. These symptoms were relieved by the application of leeches to the temples, and blisters to the neck. The relief was only temporary; vomiting, and intolerance of light and sound occurred, and, finally, periods of stupor, alternating with delirium; each of these symptoms lasting for about an hour; as yet there was no paralysis.

On the seventh day after admission I first saw him. The pulse was 130 per minute, full and strong; right pupil dilated; left side paralysed; skin hot and dry. At the seat of injury there was a large puffy tumor developed, involving the entire scalp over the parietal bone, and encroaching upon the forehead, having a crepitating feel as if emphysematous. The case demanded immediate interference, and I accordingly at once proceeded to operate. On incision at the point of injury a large quantity of fetid pus escaped from beneath the scalp. The bone was white and bloodless, with a superficial necrosis. Galt's conical trephine was applied, and on removing the disk of bone, a greenish, dirty-looking pus, about half an ounce in quantity, oozed out from between the dura mater and cranium. The patient became conscious during the operation, and complained loudly of the pain inflicted. The pulse fell from 140 to 85 per minute; the coma and delirium disappeared; he expressed himself relieved, and slept a little during the night. On the following day coma reappeared, attended with puffing of the cheeks during expiration; pulse 100. Fearing a wider extravasation of pus I again trephined the right parietal bone near the former opening, but no pus was found. As the dura mater pressed upwards, and seemed unusually tense, an exploring needle was passed through it, but no pus escaped. On the seventh of January patient was attacked with delirium and stupor

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alternating; the paralysis, which had disappeared after trephining, had again affected the left side. These symptoms improved with active cathartics.

The subsequent progress of this case, extending over about nine months, may be stated in general terms. January 12th, he had recovered from his paralysis, sensation perfect, mind clear, pulse 84. January 13th and 14th, collections of pus were detected over the frontal bone, and behind the mastoid process, and evacuated. January 17th, another abscess was opened, relieving the symptoms of irritation. On the 20th he sat up in bed; condition very favorable. Soon after this date he began to suffer from headache, and this became one of his most prominent symptoms. He suffered from attacks of vertigo, with partial and temporary paralysis of left arm; pupils both dilated, with dimness of vision; his appetite was variable; he grew anæmic, and required active tonics; the wound looked well, granulations springing up from the dura mater in great profusion; meantime, on exploring with a probe, it was found that the pericranium was separated from the calvaria over a large surface. Little change took place until March 18th, when the patient had an epileptiform convulsion, pupils fully dilated, and puffing of cheeks in expiration. These convulsions were repeated from time to time for several months, but were seldom so severe as to deprive the patient completely of consciousness. They were not traceable to any special exciting cause, nor were they relieved by treatment. They finally ceased to recur. Meantime, the edges of the scalp-wound had gradually undergone retraction, until a large portion of the parietal bone was exposed, while the probe detected a much larger separation of the pericranium. At length it was observed that the parietal bone was loosening from its attachments to the surrounding bones, first along the sagittal suture, and subsequently at its articulation with the occipital and temporal bones. The fragment of bone was frequently moved slightly, so as to hasten the process of separation. Finally, on the 3d of August, between seven and eight months from the receipt of the injury, the fragment was detached and removed through the opening of the scalp. Some pus and blood flowed from the surface of the dura mater when the bone was removed. The dura mater had a thick layer of granulations on its surface, and cicatrization had already begun where the bone was deficient. In the subsequent treatment, by dividing the adhesions of the contracted flaps, and spreading them over the dura mater, the exposed surface of that membrane was reduced from five by eight inches to three by four inches. A few days since the patient left the hospital and returned to England. He was in a feeble condition, but able to be about the ward all day. The only permanent injuries which remained were partial contraction of the fingers of the left hand, and presbyopia confined to the left eye only.

The dimensions of the portion of skull which he left, and which I now present you, have been carefully estimated by Dr. Raphael as follows:—On comparison with a skull of about the same size and age, it appears that the parietal bone, separated in part at the sutures connecting it with the bones by which it is surrounded, viz:—At the sagittal suture from its fellow; at the lambdoidal with the occipital; and at the squamous suture from the squamous portion of the temporal bone. From this last suture an irregular line of separation is continued forward over the centre of the orbit, and striking off almost at a right angle, shooting upwards, backwards, and outwards (inclining a little to the left), strikes the front parietal or coronal sutures of the left side, an inch and a quarter from the sagittal suture. The frontal bone is thus divided into two unequal parts. The separated portion has its greater base at its junction with the greater wing of the sphenoid-bone, its lesser at the junction with the parietal-bone. The right lower angle of the necrosed frontal portion, if continued downwards, would strike the upper margin of the right orbit in the centre. The ossa Wormiana, found in these sutures, are not found and have probably escaped with the discharge. The larger ones were removed with a forceps when they loosened. The

frontal portion is adherent to the parietal, and, although somewhat movable at the coronal suture, it cannot be separated without fracturing some of the serrations forming the suture. The length of the frontal portion is four inches, width two and a half inches; but on account of its irregular shape it is difficult to give the very exact measure. Both bones together measure eight inches in length, and varying from four, four and a half, to five inches in width.

(To be Concluded.)

Original Communications.

GUNSHOT WOUND OF HAND,

RESULTING IN APHONIA.

By GEO. J. RICE, M.D.,

ACT. ASSIST. SURGEON U.S.A., GEN. HOSP. NO. 1, NASHVILLE, TENN.

JAMES HEINBAUK, Co. G, 84 Regt. Ind. Vol. Inf., Connorsville, Fayette County, Ind., age, 24 years, height five feet seven inches, hair black, eyes black, was wounded by the accidental discharge of a gun, on April 31, 1863, at Little Harpitt Bridge, near Franklin, Ky., the whole charge of the piece passing through the palm of the left hand, carrying away the middle third of the metacarpal bone of the second finger, leaving a ragged wound of soft parts about two inches in length by one and a half in width. Admitted into Hospital No. 1 on May 5th, and came under my care on the 18th, at which time the whole appearance of the wound was good; granulations were rapidly forming, with a free discharge of laudable pus. The extremities of the bone bore the appearance of having been chopped off with the pliers.

Health at the time of accident good. He states that he had an attack of pneumonia in November, 1862, since which he has not been able to do much duty. Upon examination I find slight hepatization of lower lobe of left lung. At time of my first examination his pulse was healthy, 18 per minute; appetite good; sleep sound and unbroken; bowels regular. Indeed, patient was only remarkable for evenness of temper and modesty of deportment; continued to do well with water dressing; hand supported by a splint until June 5th, when he was taken with a chill, followed by fever and severe pain in head and thorax, but no change in appearance of wound. Treatment, quinia and iron. June 6th.—Heat of skin subsiding; pulse 85; still complains of excruciating pain in head, and difficulty of breathing, for which no cause is discoverable upon physical exploration; inclined to dulness of mental perception; almost soporific; difficult to get an answer to questions asked; wound very tender to touch; red areole around edge, half an inch wide; change in character of pus, which is still in large quantity, but presents a peculiar curdy appearance, as of coffee poured upon sour cream, and floats upon the surface in flakes, with a yellowish serum filling cup of wound. June 7th.—Patient comatose; cannot be aroused to speak or take any notice, except that he will take his well hand to adjust the wounded one; occasionally turns from one side of bed to the other, but always carries the wounded hand; will swallow fluids when put between his lips; respiration 30; no crepitation; pulse 80, with a prolonged, thrilling-struggling motion under the finger. Wound more inflamed; the areole an inch and a half wide, with dark purple edge; wound has extended to almost double the size of yesterday; ends of bone protruding; pus very scant, presenting a greenish yellow surface. Expression of countenance anxious, with a continual motion of lips, as though attempting to speak. Sensation very dull; only shows signs of pain upon severe pressure upon wound; will suffer the ends of bone to be grated with forceps and manipulated without flinching. June 8th.—No change of pulse, or indeed of any symptom, except

that he swallows with difficulty and is more restless; countenance more anxious, with a contraction of muscles, as though suffering pain; wound entirely dry, with curdy matter on the surface. Treatment: iron, whiskey, beef-tea, and ulmus P. and charcoal applied to the wound. June 8th.—No change in pulse, except that it is softer; breathing easier, 20 to minute; more freedom of motion; face less anxious; takes food or medicine with less difficulty; no change in wound, except radii of inflammation extending up the arm to axilla. Continue treatment. Applied acetum nitri 3j., aquæ Oj., upon lint to surface of wound. June 9th.—Symptoms ameliorating; pulse 80, soft; breathing 20, but easy; wound has thrown off its creamy deposit and lost its purple color; no suppuration; extensive tumefaction; very sensitive to touch. Sensibility increasing; will take a cup of water in his hand and carry it to his lips, but does not notice anything that may be said to him, even though it may be spoken in a loud voice; follows me with his eye with an anxious expression. June 10th.—Improving; pulse 95; breathing 18; skin moist; bowels regular; can now sit up on his bed, and take what nourishment is set before him; will reach and make clear what he wants, though he does not attempt to speak, or notice what may be said to him. Wound is less inflamed; laudable pus beginning to appear; tenderness increasing; tumefaction still great. June 11, 12.—No notable change. June 14th.—The patient is still doing well, but has shown no indications of hearing or speaking; this morning he has written upon a slip of paper that he can neither hear nor speak, that his tongue is stiff, and that he can move it with great difficulty. I have examined with care, and can discover nothing abnormal about the tongue or larynx; neither about the ear, so far as an examination with a speculum is concerned. The wound is granulating, and has taken on a healthy appearance, with a free discharge of good pus. July 1st.—Patient doing well in every respect, except that he is totally deaf and dumb. I have subjected him to many tests, such as awaking him out of a sound slumber, and asking him questions. Twice I have fired a pistol behind him when he was not aware of my presence, without his showing any symptoms of startling, when all the patients in his vicinity were quite alarmed by the report. Yesterday there was a serenade by a band; all the men who could walk were at the window, while he sat still on his bed, but when his attention was drawn to the fact he seemed quite interested in looking at the performance. I have watched him during a severe thunder gust, when the crash of thunder was most terrific; he did not appear to be aware of it, only as he felt the jarring of the building. The wound is healing rapidly, but his hand is permanently disabled. July 6th.—Still deaf. I am satisfied that, beyond a doubt, he is entirely deaf, and can make no sound with his voice; his papers have been made out for his discharge. In the meantime I shall observe him with vigilance to be sure that I am not deceived. July 18th.—I have this day received his discharge papers, approved. Wound is healed, but hand is still much swollen. The second finger will be permanently useless. Patient's general health is failing; he is quite anæmic; appetite is not good. There are indications of incipient phthisis. I am still satisfied that he is entirely deaf and dumb. Aug. 20th.—I have received letters from him at his home; he is still in the same condition, and is quite disheartened at the prospect of being permanently a mute.

NOTE FROM PROF. HAMILTON.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—This report has been furnished to me by Dr. Rice at my request, I having seen the patient at various periods of the progress of the malady. I saw him before the occurrence of coma, when the wound was healing kindly. I saw him when he was comatose, and the wound was looking very badly, and I saw him again when a favorable change had taken place in his general appearance, and in the condition of the wound. He was still apparently deaf,

and unable to make even simple sounds, but his mind seemed unimpaired. I think it very certain that he was not a malingerer, yet I would like to have had him placed under the influence of ether or chloroform, so that no doubt could have remained. The poor fellow was so thoroughly maimed by the wound that it would be difficult to conceive a purpose in malingering.

By a letter received from Dr. Chitwood, of Connersville, Ind., I learn that since his return home his voice has been gradually restored, and also hearing in the left ear, but not in the right.

Yours, etc.,

FRANK H. HAMILTON, M.D.

44 E. 26TH ST., N.Y.

CASE OF SUB-ACUTE TRAUMATIC TETANUS.

TREATED BY MORPHIA AND STIMULANTS.—RECOVERY.

By JOHN DWYER, M.D.,

SURGEON N.Y.S.V.

CORPORAL JAMES MEEHAN, 69th Reg. New York State National Guard, æt. 24, was wounded on the 30th January at the action of "The Deserted House," Suffolk, Virginia. The left arm was extensively lacerated by a fragment of shell, a large portion of the deltoid and parts of the biceps and coraco-brachialis being torn away; the artery and vein escaped injury, as did also the bone, which was, however, nearly stripped of muscle. The wound was about five inches in length and four in breadth, and engaged the upper third of the anterior and external aspects of the limb. The usual treatment was employed: cold water dressings for the first few days, anodyne poultices subsequently. Up to Friday, February 13th, the patient progressed favorably; on this day, fifteen after the receipt of injury, he complained of a slight soreness in the jaws, which, on the 14th, increased to an inability to open the mouth widely. 15th. His symptoms were, trismus (the teeth could only be separated to the extent of half an inch), slight difficulty in swallowing stimulating liquids, stiffness in the muscles at the back of the neck, pain in the temporal muscles, suffused conjunctivæ, and a *peering* expression of face; ordered a purgative. 16th. The signs became more marked, and he was removed from the hospital ward, which was full of other wounded men, to a room in another building adjoining the Surgeon's private quarters. Given four ounces of milk punch every fourth hour and three grains of opium at night. 17th. Complaints of pain along the spine, and at the ensiform cartilage—this last "catching" him, he says, when he tries to take a full breath. To-day the "risus sardoniacus" is well marked. On the suggestion of Dr. Nolan, Surgeon of the 155th New York Volunteers, an assafoetida enema was administered. Milk punch and opium as before. 18th. Bowels freely acted, no peculiar offensiveness remarked, slight tendency to perspiration. Milk punch as before; a grain of morphia at night substituted for the opium. 19th. Says he had no rest last night, as when he fell into a doze the tongue protruded, and the teeth closing spasmodically, lacerated it; tongue is much bruised and swollen, had a cork gag made to guard against this. Milk punch as before, two grains of morphia at night. 20th. Perspiration increasing, its odor being very disagreeable; ordered an assafoetida injection, after which he had a partial spasm, the limbs from the trunk down to the knees becoming perfectly rigid for a few seconds; complains principally of a pain between the shoulder blades; at 10 P. M. gave a second assafoetida enema. Diet, beef tea, tea and toast (the latter reduced to a pulp and taken in the tea by means of a feeder); appetite fair, pulse full but quicker than natural; muscles of the trunk, abdomen, and thighs, to a great degree persistently rigid. Milk punch and morphia as before. 21st. Complaints of want of rest, is very uneasy; expresses a wish to have his milk punch changed for whiskey diluted with water. Ordered an assafoetida enema, a grain of morphia during the day and two at

night; twelve ounces of whiskey. 22d. Rigidity of the muscles of the thighs well marked; at intervals is seized with strong and painful spasms in them; muscles of abdomen nearly as hard as a board. Whiskey and morphia continued. 23d. Speaks of great pain in the loins and groins, chiefly the left one; had a *general* spasm this morning, which lasted a few seconds. Fifteen ounces of whiskey and four grains (in grain doses) of morphia, in the twenty-four hours. 24th. Perspires profusely; symptoms to-day are: trismus, rigidity of the muscles of the abdomen, rigidity and painful contractions of the psoæ and femoral muscles (particularly of those of the left side), with pain between the scapulæ. The pain at the ensiform cartilage has ceased. Whiskey as before; morphia, five grains to day. 25th. Ordered purge of one drop of croton oil with four grains of the compound extract of colocynth, as his bowels were obstinately costive. Suffers greatly from the sudden and frequent "catches" in the groins and thighs; his moans and cries are distressing. Whiskey twenty ounces; six grains and a half of morphia (a dose being one grain and a half at night). 26th. Is very irritable and keeps his attendant constantly on the move; screams loudly as the spasms catch him; complains bitterly of the slightest noise; sweatings persistent and most profuse; looks eagerly for the whiskey, which he takes in small quantities at a time, largely diluted, and at frequent intervals. Twenty ounces of whiskey, six grains of morphia. 27th. Had tobacco poultices applied to the abdomen twice to day. Sponged his body with vinegar, which, he said, refreshed him much. Whiskey and morphia as before. 28th. To-day he is extremely weak; the offensively smelling perspiration literally pours from him, he is steaming all over; his cries and screams, as the spasms seize him, resound through the building and can be heard outside; this condition lasted the entire night; the case apparently hopeless; we plied him with whiskey *ad libitum*, and he had seven grains of morphia in the twenty-four hours. March 1st. This morning we notice he talks loudly and incoherently, and we conclude the whiskey is beginning to tell on him and fear that we have administered it too freely, but *the spasms are neither so violent nor of so frequent occurrence*. Decreased the whiskey to twelve ounces, and the morphia to four grains. 2d. Feels much easier, says the pain has left the groins altogether; but he is still fretful and irritable, he complains now of the "catches" coming in the knees. 10 P. M. The pain is not nearly so severe, the spasms are not so frequent and the muscles of the jaw are partially relaxed; the belly is still tense, and he is very weak. Three grains of morphia and ten ounces of whiskey. 3d. His bowels not having been moved since the 26th repeated the purge as above. The spasms are observed to-day to take him in the knees and great toes; the abdominal muscles are partially rigid, those of the legs from the knee down, and of the feet *perfectly hard*; the knees and great toes of the left side are most affected. His countenance during the last four days has assumed a very haggard expression; he has fallen off greatly in flesh, and his pinched cheeks and wasted limbs testify to the suffering he has undergone; three grains of morphine, ten ounces of whiskey. From this time he gradually improved, the stiffness in the legs from the knees down remaining, however, for a considerable period, and for days he could not bear any one to touch his limbs, as doing so brought on a spasm in them. Morphia and whiskey were still given him, the doses of each being decreased from time to time. On March 14th he was removed back to his old quarters in the hospital, and on that day his dose of morphia was one grain, and of whiskey six ounces. The following day there was a good deal of additional rigidity in the muscles of the abdomen and legs, but this soon passed off; the trismus had now nearly disappeared, and the wound was healthy and slowly cicatrizing. Early in April he was able to walk about the hospital, he gained flesh just as rapidly as he had lost it, and all his complaints were that his *left* leg was a little shorter than his right, and that he could not raise his wounded arm.

On April 15th, in compliance with an order from Dr. Hand, Medical Director (Suffolk being considered in danger of attack), he was sent with other sick and wounded of the regiment to the General Hospital at Fortress Monroe; he was then hearty and in good spirits, and could walk very well with the aid of a stick. The wound had nearly healed up.

The following are a few points of interest connected with the case:—

1. The absence of any modification of sensation or motion in the forearm or hand, though not only the site of the wound, but the supervention of tetanus, would lead to the belief that some of the nerves of the brachial plexus had been injured.

2. The mixed character of the attack, which was attended with most of the symptoms of acute tetanus, but which on the other hand was distinguished from it by the partial nature of the spasms, by the muscles of the glottis not being engaged, and above all by its fortunate termination.

3. The healthy state of the wound.

4. The peculiar course taken by the disease, which, it will be observed, affected the jaws first, then the muscles of the back—the diaphragm—the abdominal muscles, the psoas, then the thighs and legs in turn, terminating literally by going "out at the toes."

5. The screams and moans of the patient said to be usually absent in tetanus—here they can be easily accounted for by the fact that the muscles of the larynx were not involved at all.

6. The wounded side being more affected by spasm and pain than the other (also noticed by Macleod in his "Notes on Surgery of Crimean War"), this was subsequently proved by the *left* leg remaining contracted even after convalescence—the right arm was never affected in any way.

Three other symptoms, which Dr. Macleod had recorded, were also present in this case—the "hawking up of a viscid spittle," "pain darting from the wound to the spine," and the production of spasm in the limb by touching it.

The assafoetida enema, though spoken of by some as of great service, did not appear to have the slightest effect in this case; neither did the tobacco poultices. It may be said we did not give these a fair trial, but the patient had no faith in either, and strongly objected the irritation produced by turning him for the purpose of administering the one; and the exposure and wet entailed by the use of the other, were objectionable.

His diet during the trismus was beef-tea, tea and toast, and eggs, these he had chopped up fine, and he would suck them through the feeder. As he became convalescent he was nourished with farina, corn starch, etc., and before he left the hospital he was able to masticate a piece of broiled meat for dinner.

The quantity of morphia taken from Feb. 18th to March 3d, inclusive, was 55½ grains, an average of nearly four grains per diem, the greatest quantity taken in any one day being (on Feb. 28th) seven grains.

202 ounces of whiskey were taken during the same period; an average of fourteen and a half ounces per diem. Twenty ounces were taken daily three days in succession, and on Feb. 28th he must have taken thirty-two ounces.

In conclusion, it may be well to observe that the patient had the reputation of being always a sober man, and on more than one occasion between the thirtieth January and thirteenth February manifested a marked dislike to whiskey; also, that no mistake could be made as to his having actually taken the doses of whiskey and morphia stated, as the case being of considerable interest, the treatment was conducted under the immediate eye either of myself or of Assistant-Surgeon John A. Spencer, of this regiment, who was indefatigable in his attention, and took particular notes of the case daily.

PARACENTESIS THORACIS IN EMPYEMA.

By E. P. BENNET, M.D.

DANBURY, CONN.

As there is considerable difference of opinion in regard to the deleterious influence of the air when admitted into the pleural cavity, I send the report of two cases of paracentesis thoracis for empyema. The first case was of a boy of about eight years of age, who had suffered from pleuropneumonia. Paracentesis was performed, and between one and two pints of pus discharged. No precautions were taken to prevent the admission of air into the pleural cavity, and it entered freely. A second puncture was made about a week later, when another pint was evacuated; the opening so remained, and for several days the air passed freely out and in at every expiration and inspiration, yet no evil consequences followed, and the patient made a good recovery. The second was a child, eighteen months old; the case was a severe one, and when, to all appearance, the child was in articulo mortis, I punctured the chest, and discharged a pint of thick pus. The puncture did not close; the air passed freely out and in for several days; the child immediately improved, and finally recovered, to the utter astonishment of many who saw him. I have often punctured the chest for empyema, and have always found that when the opening did not close up, and air was freely admitted into the pleural cavity, the patient did best. Hence, I am led to conclude that the fears of the profession on this subject are entirely groundless, and that all the instruments for withdrawing the fluid without the admission of air are perfectly superfluous. This opinion is not based on the result of a single case, but of many cases during a series of years.

January 5, 1864.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, Sept. 23, 1863.

DR. D. S. CONANT, PRESIDENT, IN THE CHAIR.

REMOVAL OF AN INCH AND A HALF OF COMMON CAROTID ARTERY FROM THE SUBSTANCE OF A CANCEROUS TUMOR—LIGATION OF JUGULAR VEIN—RECOVERY OF THE PATIENT.

DR. CONANT exhibited an inch and a half of the common carotid artery of a gentleman 70 years of age, residing in New Hampshire. The patient, about two years ago, had suffered from a carbuncular inflammation of the right side of the neck, continuing for several months. Finally the diseased parts healed over, though it left the patient in rather feeble health. A few weeks after a little tumor showed itself on the right side of the neck, and appeared to be merely one of the enlarged cervical glands. This tumor continued to increase in size for nearly eleven months, when Dr. C. saw the case. He, however, merely prescribed an anodyne application, and some internal remedies. A few weeks subsequent to this the tumor seemed gradually to disappear. Indeed, for some months it was almost entirely gone, when all of a sudden, during the last spring, it began to increase in size more rapidly than before, and on the 13th of June, when the patient was again seen, very strong fears of the existence of a malignant element in the tumor were entertained. The mass extended so far downwards that it gave rise to symptoms of pressure on the brachial plexus of nerves. In the course of the next five weeks the pain in the arm gradually increased, and superadded to this was considerable pain at the side of the neck. This pain had become so severe that, in order to obtain sleep at night, he was compelled to crowd his finger underneath the tumor and above the clavicle, in order to remove pressure from the nerves. By the 15th of July the tumor had increased so much in size as to fill a pint bowl. The

trachea was crowded an inch to the left of the median line, the sterno-cleido mastoid muscle was thrust forward, the anterior edge of the trapezius was dissected up, while the lower portion of the tumor was fastened down against the upper portion of the clavicle. The patient being very anxious for an operation, and he being in a condition to warrant some surgical interference for his relief, Dr. C. consented. After the administration of ether an incision was commenced on the posterior part of the cleido-mastoid, and carried to the clavicle, then along the clavicle to the trapezius. The flap being turned up, the tumor was perfectly smooth. The inferior and posterior portion of the tumor was readily enucleated, but while dissecting underneath the sterno-cleido mastoid muscle it was found that the mass of disease had surrounded the common carotid artery and jugular vein. It was also found, in dissecting the upper portion of the tumor, that the parts were plentifully supplied by branches of the carotid; this was firmly ligatured. The diseased mass was then gradually sliced down until the jugular vein was reached, when it was found to be full of matter, and hard. It was then discovered that the ligature had included the vein as well as the carotid and its branches. The artery at the lower part of the tumor, about an inch and a half below this point, appearing to be very fragile, a second ligature was applied. As much of the tumor was removed, by slicing, as could be done, without taking out its intermediate portion, leaving artery and vein intact, surrounded by a small portion of tissue. The case progressed very well, subsequent to the operation, so that at the end of three weeks he was able to go alone to his barn and attend to minor affairs about the farm. At the end of five weeks the wound had entirely healed, except at the point where the ligature came through. The upper ligature had not come away, and in withdrawing it Dr. C. brought with it that portion of the vessel ($1\frac{1}{2}$ inch) included originally between the ligatures. The patient at last accounts was doing well, though there was still considerable discharge from the wound. The cervical glands again show a tendency to enlarge. The tumor was cancerous.

DR. ELIOT asked if it were usual for malignant tumors to decrease during any particular stage of their existence.

DR. CONANT replied that such was so unusual that in the instance referred to he was inclined at one time to the opinion that the disease was not of a malignant character.

DR. CLARK remarked that vascular malignant tumors were very apt to vary in size at different periods, according to the amount of blood that they circulated. In this connexion he referred to a case of cancer of the tongue, which was shown him some years ago by Dr. Buck. At one time the tumor decreased so markedly in size that Dr. Buck was inclined to give up his diagnosis, but in the course of a few weeks after the disease again took on a very rapid growth. Dr. Clark examined the tumor microscopically and proved it to be of a cancerous character.

DOUBLE AMPUTATION.

DR. CONANT related the case of a severe railroad accident, which occurred on a train on which he happened to be a passenger. The patient was a newsboy, who fell from the train, and two cars passed over both his legs, severing one completely, and leaving the other hanging by a small strip of flesh. He performed a double amputation, one at the junction of the upper and middle-thirds, and the other a little lower down. With the exception of the occurrence of secondary hæmorrhage from the detachment of the ligature, by another surgeon two days after, the patient did well. He merely related the case for the purpose of illustrating how important an operation could be performed by instruments which were carried in a case that could easily be placed in the coat-pocket. The cutting was supplied with an adjustable handle, and all the other required instruments were packed away in the smallest conceivable space. He had devised the case for the purpose of operating at the Dispensary.

CASE OF TREPHINING.

DR. CONANT also presented a small portion of the skull of a patient whom he trephined under the following circumstances. Happening to be among the Adirondack Mountains, he was requested to see a young man who had sustained a severe injury of the head, and a fractured thigh, by being thrown from a wagon. For seven weeks the patient had lain in a partially unconscious state. The thigh had not united, but around the seat of the injury an abscess had formed, which was constantly discharging a great quantity of matter. The patient would seem to notice to a slight extent what was going on around him, and would take up a word from a question that would be asked him, and repeat it over and over again, each time louder, until he would be apparently exhausted. His hearing was so acute that he would even catch at whispered words in the same manner. Dr. C. concluded from this circumstance that the grey substance of the brain was affected rather than any other part. On examination at the seat of the injury no lesion of the skull could be detected; still, the friends being anxious for the operation, Dr. C. consented to perform it. Having no trephine at hand he used a chisel and mallet for the purpose, carefully cutting out a small button of bone.

There was nothing particularly noticeable about the dura mater, except, perhaps, that it seemed as if it had shrunk away, notwithstanding there were evidences of the existence of serum underneath. Dr. Conant in this connexion mentioned the fact that he had witnessed a post-mortem examination in a case of typhoid fever, by Mr. Laycock of Edinburgh, in which this peculiar symptom of repeating words was a distinct feature, and that the gentleman maintained that it was due to trouble at the base of the brain, in the floor of the fourth ventricle. At the autopsy Mr. Laycock found a granular condition of the living membrane of the iter a tertio ad quantum ventriculorum.

DR. CLARK thought that such a point was a little too finely drawn.

Reports of Clinics.

PROFESSOR RAPHAEL'S SURGICAL CLINIC

AT THE NEW YORK MEDICAL COLLEGE.

REPORTED BY J. H. THOMPSON, M.D.,

GUNSHOT WOUND.

J. S., aged thirty-two, born in the United States, wounded in the battle of Antietam, September, 1862, by a minié ball which entered the anterior aspect of the left leg, striking the tibia exterior to its spine, passing through to the leg between the tibia and fibula. The ball was extracted posteriorly after suppuration had revealed its position under the integuments. Several sinuses have made their appearance at intervals, and more or less suppuration has continually been present. The sinuses which now remain are discharging an offensive pus. Five or six small pieces of bone have been exfoliated, but none very lately. Advised to dress the wound with the following ointment,

R. Balsam Peruv. 3j,
Simpl. cerat. 5j.

The next time he came, the wound not having healed, he admitted that he had had gonorrhœa lately, and syphilis six years ago. Pills, as follows, were prescribed,

R. Massæ hydrarg. 3j,
Pulv. opii, gr. v. M. et ft. pil. No. xx.,

One pill to be taken three times a day, and an ointment of hydrargyri nitratis 3ij., et cerati simplicis 5vj., was given to dress the wound.

As the wound is very tardy in healing, and is also quite tender, the cicatrix being adherent to the bone, he was

told to paint it daily with tinctura iodinii et spts. vini rect., in equal quantities. The last time he was at the Clinic he came to report himself as cured.

PARONYCHIA.

Wm. Van A., aged fifteen, born in the United States, bone felon on the thumb of the right hand, which he has had for one week. Prof. R. remarked that this is one of the most painful affections, and as the matter is confined between the periosteum and the bone, and cannot find its way to the surface, if not interfered with, the result is necrosis. They may, however, frequently be dispersed by immersing the part affected in water or lye as hot as can be endured, when they first make their appearance, but as this one has already existed too long for such treatment, it was laid open through the periosteum to the bone, thereby giving vent to a considerable quantity of pus, and also affording immediate relief. He was then ordered to poultice it with linseed meal for a few days, after which he is to dress it with simple cerate.

PSORIASIS.

Ann A., aged forty-five, born in the United States, chronic psoriasis, confined to both legs below the knees. Prescribed liq. potassæ arsenitis, gtt. x., three times a day, upon which she improved, but complained that the medicine made her sick. It was therefore discontinued, and the following given,

R. Pulv. rhei,
Sodæ bi-carb., āā, gr. xlvij.,
Pulv. ipec., gr. vj.

To be made into xxiv. pills. One to be taken three times a day. And an ointment for local application, made as follows:

R. Hydrarg. rub. precip.,
Terebinth. Venetæ, āā. 3 i.,
Ung. simpl. 3 i. M.

The patient subsequently presented herself at the Clinic completely cured.

TERTIARY SYPHILIS.

A. C., aged thirty-three, born in Denmark, sailor, tertiary syphilis. He had two chancres on the prepuce three months before he presented himself at the clinic, which broke out several times. He now complains principally of pains in his bones and head, and also sore throat, in which there are some few ulcerated points. Some of the cervical glands are enlarged, and may easily be felt. He was put upon

R. Potassii iodidi 5 ij.,
Tinct. cinchonæ co.,
Aq. uæ, āā. 3 ij. M.

S. Two teaspoonfuls three times a day, and also

R. Hydr. bi-chlor., gr. iv.,
Ammonia mur., gr. vj.,
Micæ panis, q. s, ft. pil xxxij.

S. One pill three times a day.
This patient is now entirely well.

ONYCHIA MALIGNA.

Patrick F., aged seven years, born in this city. This is a case of onychia maligna. The end of the middle finger of the left hand, which is the one affected, is much enlarged, red, and exceedingly painful. The nail has grown quite long, and is loose. He has had this sore about four weeks. Has always been a healthy child, but is rather pale now. Lives down in a damp basement.

Prof. Raphael remarked that this affection frequently arises from living in unhealthy localities, thereby inducing a cachectic condition of the system, and is also traceable sometimes to a syphilitic taint. The nail, which had become dark and shrivelled up, was removed with a pair of forceps. An ointment

R. Aq. ext. opii, gr. x.,
Cerati simpl. 3 ss, M.,

was given to dress the finger with. He was also ordered to take five drops syr. ferri iod. three times a day.

The above treatment had entirely cured the boy the last time he presented himself at the clinic.

INGUINAL HERNIA.

Geo. W., aged twenty-two, born in Ireland, inguinal hernia, strained himself two weeks before he presented himself at the Clinic. He now complains of a swelling in the right groin about as large as his fist. He procured a truss, and the hernia is not apparent now, but he says it comes down if he leaves off his truss.

Prof. Raphael remarked, that in recent cases of hernia the mere pressure of the truss will generally create enough inflammation to cause a sufficient formation of lymph to block up the inguinal ring, and thereby cure the hernia as radically as by an operation. But there is a good deal of skill required in the adjustment of a truss, and it should accurately fit the ring. He is advised to continue to wear the truss, allowing him to leave it off at night, being careful to support the part with the hand on arising in the morning until he gets his truss on.

ENCYSTED TUMOR.

Thos. R., aged fourteen, born in New York, encysted tumor situated just under the left malar bone, noticed it about two years ago; it has increased in size very slowly, and is now about the size of a black walnut. Prof. R. operated by transfixing the tumor with a sharp-pointed bistoury, and cutting outwards, making an opening of somewhat more than one inch in length, the contents of the sac, which were of a cheesy consistency and appearance, were pressed out, and the sac was then dissected out entire. One suture was put in the centre, and the remaining portions of the wound drawn together with strips of isinglass plaster, over which a compress was bound down with some more plaster.

After evacuating the contents of the encysted tumor, the sac should always be removed, either in the manner here described, or as is frequently the case, it may be simply drawn out with a pair of forceps. Unless this is done they will be almost certain to fill up again, thereby rendering a second operation necessary.

In this case but very little inflammation supervened, and the greater part of the wound healed primarily, the remainder closed up nicely after a few applications of adhesive strips, leaving a very slight cicatrix.

ADHESION OF THE CHEEK TO THE JAW.

Thos. J. McC., aged sixteen, born in New York, was salivated at five years of age; the inner side of the right cheek is adherent to the gums of both the superior and inferior maxillary bones, which prevents him from opening his mouth more than one-fourth of an inch. He says he could open it wider three months ago than now, and that it has been gradually restricting the movement of his jaw for a considerable period.

The adhesions were divided between the cheek and upper jaw, which gave him considerably greater mobility than he had before. He would not submit to having any further operation for the division of the parts from the lower jaw; and as nothing more could be done he was told to rinse his mouth with cold water frequently.

TERTIARY SYPHILIS.

Jas. J., aged twenty-eight, Irish, had syphilis eight years ago, and was salivated. Has had ulcers on his legs, and also a node on the sternum. The latter, however, has been removed by the use of the iodide of potass. His gums are sore now, for which he is ordered to use as a wash R. Tinct. myrrhæ 3 i. et Aquæ 3 ij., M., and also to continue the use of the potass. iod.

THE Chair of Chemistry at Berlin, also that at Bonn, have been offered to Dr. Hofmann, of London. The University of Bonn propose to place £20,000 at his disposal for the establishment of a laboratory.

Progress of Medical Science.

PREPARED BY E. H. JANES, M.D.

GLYCERINE IN THE TREATMENT OF DISEASES OF THE EYE.

Two classes of preparations are introduced, called glycerates and glyceroles; the former, an unctuous substance made by associating glycerine with another substance, as starch, for example, and used as an excipient for different remedies with which it forms ointments, pomades, etc., while the latter consists simply of glycerine associated with some remedy for which it forms a vehicle. The glycerate of starch is recommended by M. DEBOUT as the best excipient for ophthalmic pomades, and is prepared by taking of glycerine by weight fifteen parts, and starch one part, and heating in a capsule over the flame of a spirit lamp stirring with a spatula until complete hydration of the starch has taken place. This is free from the unpleasant odor of grease, does not become rancid, and instead of causing erythema, cures it when it exists. Owing to the solvent properties of glycerine, we are free from any mechanical irritation that might arise from the medicament not being completely dissolved.

The following glyceroles are recommended by M. Foucher as collyria: Pure glycerine, thirty grammes; borax, two to four grains, or sulphate of zinc, one to three grains, or sulphate of copper, one to four grains, or tincture of iodine, four to eight grains, or perchloride of iron, one to four grains, or tannin, two to four grains, or calomel, three to four grains, or Sydenham's laudanum, two to four grains.

These are to be used as each particular remedy is indicated, as for instance, the two first in ordinary conjunctivitis, whether palpebral or ocular. The glycerole of laudanum for the relief of photophobia. For chronic affections the sulphate of copper, etc. The strength of these preparations may, of course, be varied to suit any particular, or according to the views of the practitioner. If ointments are wanted, the following are proposed by M. DEBOUT:—Glycerate of starch, fifteen grammes, sulphate of copper, 0.01 to 0.25 grain, or for chronic affections, glycerate of starch, fifteen grammes, binoxide of mercury, 0.15 to 0.50 grain, substituted for red precipitate ointment. In addition to these preparations there is the glycerate of starch in combination with the iodide of potassium, and of calomel and of nitrate of silver, and so on. Even glycerine alone has proved a remedy in many instances. It readily cleanses the eye from all purulent secretions, and aids other means, as scarification, cauterization, etc., and yet to obtain all the advantages, it is of the first importance that the article be genuine, and free from the impurities of commercial glycerine.

Mr. R. Reynolds, of Leeds, has written a letter to the Pharmaceutical Society of London, in which he condemns in strong terms this adulteration, which he believes is practised to a great extent in the preparation of galenic remedies. While no harm would result from the substitution of methylated spirit in the compositions of liniments, etc.; its cheapness when compared with alcohol, and the triumphs of chemistry in so far purifying it from its nauseous taste, that by slightly flavored additions it becomes indistinguishable from similar preparations made from pure spirits, so strongly tempts the cupidity of the not over-honest manufacturers that Mr. R. declares, that "the medicines supplied to the poor are now all but exclusively methylated." He tells the society that its members would stand aghast could they know to what extent the manufacturing chemists engage in this business. He speaks of one house as using medicinally 12,000 gallons of methylated spirit per annum. From it is prepared "that impudent trash sold as Indian brandy, and gin, and whiskey." He appeals strongly to the society to discountenance this practice, not only by the allegiance due to the College of Physicians, who have expressly forbidden it, but by the

allegiance they owe to truth, and to the reputation of an honorable profession, while "methylated spirit in pharmacy has become a gigantic lie."

American Medical Times.

SATURDAY, JANUARY 16, 1864.

FEVER IN HOSPITALS.

WE have the melancholy duty of recording the death of another member of the resident staff of Bellevue Hospital. DR. ROWE is the fifth resident medical gentleman who has died of fever contracted in the discharge of his duties in this institution within the last nine months. During the same period ten more of the staff have passed through the fever, and have recovered or are now convalescing. This is a startling record of mortality under any circumstances, but in the present instance is simply harrowing. Five young physicians in the vigor of early manhood, lingering still in this great practical school to give to their education that perfection of temper and firmness necessary to rapid success, fall victims to fever. In the death of such young men, highly educated, devoted to duty, and of noble aspirations for excellence, the whole profession sustains a great, an irreparable loss. It can ill afford to needlessly sacrifice on the altar of humanity those who are so eminently qualified to sustain its dignity and honor, and to advance the science of medicine beyond its present bounds. If these things must needs be, if suffering humanity demands the sacrifice, the victims are always ready to be offered. The noblest members of our profession have yielded their lives a willing offering to stay or mitigate the horrors of pestilential and epidemic diseases. Our hospitals bear ample testimony to the courage and heroic bravery of young medical men in the midst of danger from the most fatal infectious and contagious diseases. No post of duty is deserted, and when one falls another instantly steps forward to fill the ranks.

But however necessary it may often be for the physician to take his life in his hand and go boldly into the midst of infection, and if need be incur the fearful penalty of death, the question recurs, Is it necessary to sacrifice so many valuable lives of young medical men in our hospitals to typhus or typhoid fever? Are not these preventable diseases? What are the teachings of sanitary science? We earnestly put these questions to the Medical Board of Bellevue Hospital, and to the Commissioners of Charities and Corrections, as the constituted guardians of the sanitary affairs of our largest hospitals.

The spacious and liberally provisioned hospital buildings, with their thousands of comfortable beds, bear testimony to the beneficent and large purposes of the governing Boards of these noble institutions, but if it occurs that by some failure to conform their administration in accordance with the inflexible laws of sanitary science and the requirements of nature, the costly edifices and the richly furnished wards are transformed into fever-nests, and furnaces of infectious and deadly disease, spreading death to all classes of patients, and secretly poisoning the faithful attendants and zealous young physicians who are on duty there, then we are in duty bound to press the inquiry—Who is respon-

sible for the needless sacrifice of these lives, and the official guardians of those institutions must ask, What does sanitary science teach concerning such maladies?

It is not our purpose to enter upon an elaborate discussion of this subject, but it is manifestly necessary that instant and thorough reform should be effected in reference to the causes of endemic and infectious fevers in our hospitals. Though the localization of such maladies is an opprobrium to any hospital, lamentable experience in a very large number of hospitals in our country has shown how very difficult is the task of eradicating the typhic poison in the wards and quarters where it finds a wonted nidus and hiding spot. Sanitary science teaches, and experience has abundantly demonstrated, that typhus and typhoid fevers are absolutely preventable diseases, and that the typhic poison itself is not so incorrigible as to defy medical and police control. But the virus of these fevers must be rigorously dealt with as a terrible foe. Its birth is in the crowded ward, the unventilated and densely packed hall, the filthy tenement, and where effete organic matter chances to be accumulated or neglected. The essential fact relating to the processes of these fevers is, that they rapidly waste the organic elements of the human structure, and that in ordinary apartments with an atmosphere at all confined, as by closure of windows and open fire-places, the typhic poison is fearfully communicable or personally infectious and contagious. And these are the facts that demand attention from the governing Boards of our hospitals.

Shall the present causes of the fever pestilence in Bellevue and other hospitals continue because, forsooth, there is supposed to be an *epidemic constitution* of the season or of the atmosphere this year? The same fever tragedy is enacted within the same walls, and from the same preventable causes, year after year; and it will be repeated every winter until those causes are removed. Five of the choicest young physicians in a single institution killed by this stealthy enemy of our hospitals, during the past few months! More such sacrifices will rapidly follow, unless medical men come forward, and, with the redeeming power of sanitary knowledge, effect the needed reform.

As a preliminary step in that work of reform, let a rule be peremptorily ordered in all the hospitals of this city, that patients with typhus or typhoid fever shall not be allowed to remain in a ward where there are any other maladies, surgical or medical; and, secondly, let there be such improvements in the ventilation of all the wards and hospital apartments as will effectually prevent the presence or the continuance of an endemic typhic condition. *An abundant and continual supply of fresh air dissipates and destroys the typhic poison.*

But the windows will be closed, the fire-places are already hermetically sealed in most wards, and, sad to say, nurses and patients alike cry out against fresh air; they are not accustomed to such air; surgical patients, consumptives, dyspeptics, and bed-ridden patients with organic maladies, will not endure and do not need such ventilation as the fever patients must have. For such, and for stronger reasons, the fever patients must be put into a domestic quarantine, and should be kept immersed and flooded in fresh air. And for fever wards there should be a specially rigid government, and *specially trained nurses*. This can only be thoroughly accomplished by establishing

a fever hospital. And we put the question to the Commissioners: If they ought not to open on the spacious islands under their charge a separate building for the reception and treatment of fever? A simple pavilion can be quickly constructed with full ventilation, which would insure a greater percentage of cures, and complete immunity of attendants from this fatal disease. Such a fever pesthouse is as much required as a separate building for the isolation of small-pox.

We know how vague and uncertain the practical knowledge of these considerations is among medical men; and because we are forced to witness most cruel and needless sacrifices of precious lives, in consequence of such inattention to momentous facts, we speak thus urgently. And we pray our medical brethren to lend their aid to the work of rooting out the fever nests of our crowded districts. Let them insist upon the removal and proper surveillance of all communicable sources of contagious fever, and soon we shall see each hospital establishing a separate and well isolated pavilion for the treatment of such fever; and not until such fever pavilions or "shanties" are substituted for fever wards, or promiscuous wards for typhic patients, will fevers cease to burst forth in our large hospitals; and while the fever demon of the crowded hospital holds carnivals, noble young martyrs will swell the immortal group of faithful physicians whose heroism in duty ennobles the history of the medical art, and to whose names the profession affectionately points and says:—*Hæc mea ornamenta sunt.*

THE WOMAN'S HOSPITAL.

THE annual meeting of this association was held Jan. 9, at No. 83 Madison avenue. Mr. Beekman, Chairman of the Board of Governors, thus spoke of the affairs of the Institution: "I have the pleasure to tell you that despite of delays which seem longer than they are, when the work accomplished is estimated justly, the hospital now possesses, by gift from the city, the block of ground bounded by 4th and Lexington avenues, 49th and 50th streets, free of all debts or incumbrance. More than \$50,000 have just been raised by donations, which entitle the Governors to receive \$25,000 from the Comptroller of the State of New York, and as soon as a further sum of \$50,000 shall be raised by donations, the State is pledged to pay to your Hospital twenty-five thousand dollars more. Seventy-five thousand dollars are therefore now secured; the foundation of one of four pavilions has been prepared, and the construction of a portion of the edifice sufficient for many more patients than can at present be cared for, will go forward." The report of the Treasurer showed the receipts of the year ending January 9th, to be \$7,619 47, including \$3,751 from donations, \$597 30 from the State, \$232 from subscriptions, \$2,462 75 from board of pay patients, while the expenses amount to \$6,929 14. Dr. Thomas Addis Emmett, Surgeon to the Hospital, reports that during the past year a number of patients have been readmitted, and discharged cured, cases which a few years ago had been deemed incurable. Through the skill and care of Drs. Thomas and Swift, with Dr. Winston's assistance, the number of outdoor patients treated during the year has been increased to six hundred and ten cases; the number treated in 1862 being about four hundred, and during 1861 some two hundred only. This portion of the service has been under their

exclusive charge, each serving on a different day, and by a division of labor it has become a most important feature in the institution. During the past year one hundred and ten patients have been under treatment in the Institution; of these forty-one cases have been discharged cured. In addition forty-two cases have been temporarily discharged as improved, but in fact are chiefly curable surgical cases, requiring several operations, and sent home to recuperate in the interval. Two cases have been discharged as incurable, and one death has occurred after the removal of a large fibrous tumor, but from an accidental cause, having no connexion with the operation, which was in itself a success. On the first of January, 1864, twenty-three cases remained in the Institution; five of these were at the time convalescing, and have since been discharged cured. Eighty-five surgical operations have been performed during the past year, the greater portion of which were of a severe character. The Institution has been entirely free from all epidemic complications so often following surgical operations in public and private practice. Whilst the aggregate number of patients admitted to the Institution has not increased, the fact must be offered in explanation that each year the cases admitted are found to be of a more difficult type; as an example, forty-three cases of Vesico-Vaginal Fistula were admitted. About two-thirds of these had been previously operated on by different surgeons. As the profession becomes more familiar with the operation, but few will seek admission, except those of a more hopeless character, requiring a long and tedious course for their relief.

A NEW HOSPITAL IN NEW YORK.

By the will of the late JAMES H. ROOSEVELT, Esq., about \$900,000 have been bequeathed for the establishment and endowment of a hospital in New York. The testator gives the fund in trust *ex-officio* to the President of the Society of the New York Hospital; of the College of Physicians and Surgeons; of the New York Eye Infirmary; of the Demilt Dispensary; of the New York Institution for the Blind, and four citizens, mentioned by name. No restrictions are placed upon the Trustees in regard to the locality or character of the hospital. The fund being ample, we hope to see in New York a hospital which in every particular answers the latest requirements of sanitary science in hospital construction. As at present constructed and managed all our hospitals are great foci of contagion, great pesthouses, and fever nests. They are too often located in thickly populated parts of the city, or have sought localities where they are soon to be enveloped by a dense population; they are constructed of bricks and mortar, with much concern about warmth, but no thought of fresh air; diseases of various descriptions are crowded together with little regard to their reaction upon each other. This is radically wrong, and productive of more human suffering than it relieves. Let us have one general hospital located and constructed with sole regard to the rapid recovery of its inmates. To accomplish this object it must be located where earth, air, and all the surroundings promote health; and it must be so constructed as to concentrate within its interior every health-giving influence. All experience proves that such a hospital should be located without the city limits, and should be composed of one or at most two-story pavilions, so arranged as to give the largest exposure to sun and winds. We have one further suggestion to

make, and that is:—Establish the precedent of paying the medical officers liberally for their services.

A COURT-MARTIAL FOR THE SURGEON-GENERAL.

It is stated that the President has summoned a court-martial to investigate the charges against Surgeon-General HAMMOND. We trust this investigation will be thorough and impartial. We have had many intimations that our recent strictures were just, so far as they related to the thoroughly partisan character of the Commission which has been seeking official corruption in the Medical Department. Let this investigation be fair and impartial, and if fraud exist let it be traced to its proper source, and let the punishment fall upon the responsible party.

Reviews.

OUTLINES OF THE CHIEF CAMP DISEASES OF THE UNITED STATES ARMIES, AS OBSERVED DURING THE PRESENT WAR. A Practical Contribution to Military Medicine. By JOSEPH JANVIER WOODWARD, M.D., Assistant-Surgeon U.S.A.; Member of the Academy of Natural Sciences of Philadelphia; of the Pathological Society of Philadelphia, etc., etc. 8vo., pp. 361. Philadelphia: J. B. Lip-pincott & Co. 1863.

The remarkable industry and energy, as well as the soldierly qualities of endurance and patient toil, which the better class of our military surgeons is exhibiting in the medical service of the Federal Army will be mentioned in all countries as an honor to our profession, and as testimony to the high and ennobling views which the true physician takes of professional and patriotic duty. DR. JANVIER WOODWARD, the author of this carefully prepared treatise on *Camp Diseases*, is an Assistant-Surgeon in the army, and having been officially detailed to the work of preparing the "Medical History of the War," the duties of his appointment have brought before him for study and analysis all the official reports and special returns of the army medical service, both in the field and in hospitals. That in the course of this important duty as Medical Historian of the War, Dr. Woodward should have found a vast amount of practically important matter that should be immediately contributed to the medical literature of our country, and that he should have found in the accumulated reports before him many evidences of a want of such a treatise as he has prepared upon camp diseases, was to be expected; but we confess that such a goodly volume as the one before us, at this hurrying period of the war, is scarcely less surprising than gratifying.

In prefacing his treatise, the author states that—

"The importance of the affections referred to in the following pages, the vast numbers of human lives exposed to them, and the fact that in this country, now making war on a great scale for the first time in the present generation, camp diseases are in many respects new to those called upon to treat them, are considerations which in themselves alone might justify this attempt to grapple with the problem of the mortality of armies in America."

The subjects considered in this volume, are arranged under the following heads:—

CHAPTER I.—Introductory, and a Review of Questions relating to the Classification and Statistics of Diseases in our Army.

CHAPTER II.—Determining Conditions—Malarial Influence, Crowd Poisoning, the Scorbatic Taint.

CHAPTER III.—Camp Fevers—Typho-Malarial Fever, Diseases that may be confounded with it.

CHAPTER IV.—Intermittent Fevers—Simple Intermittents, Congestive or Pernicious Intermittents.

CHAPTER V.—Jaundice.

CHAPTER VI.—Camp Diarrhœa—Simple Diarrhœa, Acute Enteritis, Acute Dysentery, Chronic Diarrhœa.

CHAPTER VII.—Camp Diseases.

CHAPTER VIII.—Catarrh.

CHAPTER IX.—Pneumonia.

CHAPTER X.—Pseudo-Rheumatic Affections.

Though DR. WOODWARD treats these subjects mainly from the stand-point of a skilled and logical analyst of the accumulated experience and reports of medical officers on active service in the camps and hospitals, he also writes from personal observation, and in his chapters upon the leading maladies of our camps as observed by himself during the Peninsula campaign, viz. the *Scorbutic Taint*, *Typho-Malarial Fever*, and *Camp Diarrhœa*, he writes with great force and clearness.

Under the head of *malarial influence* the author makes a statement which, though not new, is particularly worthy the more exact and rigid inquiries of practitioners in their study of the phenomena and the etiological causes of the blending and transformation of *types* in fevers. He says—

"Intermittents may pass into remittents, and remittent fever may become continued in the same patient and during the same attack; the frequency of this transformation increasing in southern latitudes, and the reverse also taking place, continued fevers passing into remittents, and these into intermittents, especially when patients suffering from them are transported to a more northern climate."

"Crowd-poisoning" is justly recognised by the author as one of the most perilous and widely acting sources of fatal fevers in camps; and, acting in connexion with the *scorbutic taint*, and bad *camp-police*, he regards it as a constant element in the production of the *typhoid fever* of the camp.

"During the present war the number of cases reported under the head of typhus and typhoid fever has prodigiously increased, 22,801 cases having been reported during the year ending June 30th, 1862, in an annual mean strength of 281,177 men, being 81.1 cases per thousand of mean strength, or about 8 per cent. It is true, as will be seen hereafter, that the great majority of this host of cases were far from being merely the simple uncomplicated enteric or typhoid fevers of civil life. They were variously complicated with malarial or scorbutic phenomena or both, and this oftentimes to such a degree as to compel the recognition of a mixed type of disease deserving even a new name. Yet in general adynamic characters, and in the nature of the intestinal lesion, the camp fevers of the army have presented so many analogies to typhoid fever as to show that the causes which produce that affection in civil life were operating in full force, although the resulting pathological condition was modified by the operation of other morbid influences.

"These causes are especially to be sought in overcrowding, imperfect ventilation, and want of cleanliness, or—as it is characteristically termed by army surgeons—bad police. These three conditions are usually associated, and may be designated by the single term 'crowd poisoning.'"

A striking illustration is given of the fatal power of crowd-poisoning in crowded transports, a source of evil that should no longer be left to the caprice of quartermasters and army contractors, as has hitherto been the case in all our great coastwise expeditions.

"Surgeon J. H. Brinton, U.S.V., has informed the author that in March, 1862, a few weeks after the capture of Fort Donelson, the army of General Grant embarked in some seventy steamboats of every size, under command of General C. F. Smith, to ascend the Tennessee River. From deficiency of transportation they were crowded into the boats with but little regard to sanitary precautions. Circumstances compelled this force to remain some ten days or two weeks. During this period the fever cases increased greatly in numbers, and assumed a degree of severity which caused considerable uneasiness to the medical officers of the expedition. Immediately after their disembarkation, however, the fever diminished materially in both the number and severity of the cases. Facts of this class might be multiplied to any extent, but this single illustration must here suffice."

The *scorbutic taint*, that lurks like a demon in all great

armies when campaigning, has sorely smitten our brave forces during several of their more important campaigns, but no army of equal numbers, probably, has suffered less or been so promptly and so generously rescued from such peril. And in this good work of hunting the demon of scurvy from the Federal camps, the people of the North have taken an intelligent and most generous interest. Had the Sanitary Commission no other claim to public confidence and gratitude, this alone is sufficient, for, wherever it has discovered the dangerous foot-prints of this Protean enemy of the soldier, it has quickly and at any cost rushed to the rescue with sovereign specifics from the vegetable gardens of the people. DR. WOODWARD says he

"Is well satisfied, from personal observation, that both as a distinct affection in its early stages, and as a complicating influence, affecting the other camp diseases of the army, scurvy has hitherto played a large part in the phenomena of disease in the Eastern armies and conversation with many of the leading medical officers of the armies of the West has satisfied him that the phenomena there presented have been in this respect so precisely similar that if his interpretation is correct for these it must apply to those."

Like all other practical men who have had to deal with the *scorbutic taint* in the management of all classes of patients and diseases affected by it, our author recognises no other certain remedy than that which removes the ruling cause, viz. *sameness of diet*, and *absence of fresh vegetables*. Potash-salts, chalybeates, and lime-juice are but palliatives, not remedies and preventives. We thank DR. WOODWARD for very plainly stating the *material* and the *official* cause of the suffering to which our troops have been exposed from scurvy; for it is so customary for public men and military officials to boast of the excellence and excess of the army ration, that to reform the defects and evils actually imperilling the best armies in the field, requires no small degree of intelligence and determination. We can bear testimony to the truth and the vital importance of the following statements upon this subject:

"It is true that, by the act of Congress improving the ration during the present rebellion, it is ordered that one pound of potatoes per man shall be issued at least three times a week if practicable; but difficulty of transportation and many other causes, some of them perhaps unavoidable, have interfered with the complete execution of this wise provision. It may be unhesitatingly affirmed that the issue of potatoes has hitherto, as a general rule, been rare and incomplete, not only with troops on the march and in remote posts, but in the great encampments of the largest armies, even so situated that want of transportation was no available excuse.

"The potatoes, thus imperfectly supplied, are the only fresh vegetables directed by law to be furnished to the troops, and although the commissary department has availed itself of the general provision, which authorizes that the equivalent of any of the ingredients of the ration may for convenience or necessity be substituted, and furnished *onions* occasionally instead of potatoes, yet the issue of *onions* has been still more limited than that of potatoes.

"Desiccated vegetables, it is true, have generally been available and furnished in sufficient quantities; but at the best these are only an imperfect substitute for the fresh articles, and a want of care in cooking them has caused them to be regarded with dislike by the men, who often neglect to use them when furnished, so that even the benefit which they are capable of producing has not been enjoyed. * * *

"The general criticism, then, which may be made upon the ration of the American soldier, is that, as practically issued, it is deficient in fresh vegetables, and that in view of this deficiency it is not surprising that a certain amount of slight scorbutic disease exists among our troops. That it has not done so to a greater extent is due to the liberal character of the ration in other respects, especially in the allowance of fresh meat, which has been freely used,—cattle being driven with our armies in all their large movements. In fact, while criticising what he believes to be the chief deficiency of our ration, the author is freely willing to acknowledge it to be in many respects the most liberal and best constituted army ration in the world. The full allowance of meat and of bread is even perhaps too

liberal, and might be economized to advantage for the purpose of supplying vegetables. This point is insisted upon because it is believed that the surgeons of regiments in the field, with the co-operation of the line officers, can do much to effect an improvement in this respect, and to prevent the outbreak of scorbutic affections, even under existing laws, and without any alteration in the present ration."

The army surgeon, and, in fact, all practising physicians, will read with profit our author's chapter on the *scorbutic taint*; and with scarcely less interest will they study the elaborate and very practical discussions which this treatise contains upon the *Typho-Malarial* or *Camp Fever*, the most fatal disease of our armies. We attempt no analysis of the sections which the author has devoted to this most important and composite malady, as every physician is liable to be burdened with the responsibility of treating lingering or non-convalescent cases of this fever in soldiers on leave at home as well as in hospitals, and for this reason, if for no other, should read this chapter of the book for himself.

Though the author has deemed it expedient (and happily we think), to give to the prevailing fever of our camps a new and significant name, he states the etiological facts clearly and in familiar terms when he says:—

"On the one hand, typho-malarial fever is not to be regarded as a new disease in the ordinary acceptation of the term, that is, as an affection characterized by some new pathological element. Nor, on the other hand, is it just to look upon it merely as a modified enteric fever, since the malarial and scorbutic phenomena which accompany it are predominant in many cases—perhaps, on the whole, in the greater number. Much rather should it be considered simply as a new hybrid of old and well known pathological conditions, in which the exact train of symptoms is as variable as the degree of preponderance attained by each of the several concurring elements."

A malady that is acknowledged to produce one third of all the deaths from disease in our armies, and which certainly is preventable, is abundantly worthy the extended notice which it receives in the treatise before us. And this remark applies with relative force to the author's chapters upon the diarrhoeal diseases of camps, and to measles, pneumonia, and rheumatism, all of which are treated in an exceedingly practical and suggestive way.

(To be Continued.)

Army Medical Intelligence.

ORDERS, CHANGES, &c.

Surgeon B. A. Clements, U.S.A., now on duty with the Army of the Potomac, to report in person to the commanding General, Department of the East, to relieve Assistant-Surgeon J. W. S. Gouley, U.S.A., in charge of Central Park General Hospital; Surgeon Gouley to report for duty to the commanding General Army of the Potomac.

Assistant-Surgeon W. H. Forwood, U.S.A., on account of a severe wound, is relieved from duty in the Army of the Potomac, and will report in person without delay to the commanding General, Department of the Snsquahanna, for assignment to duty in the Satterlee General Hospital.

Surgeon Silvanus D. Freeman, U.S.V., is relieved from duty in the Middle Department, and will report in person to the commanding General, Department of the North-West, for assignment to duty.

Surgeon L. H. Holden, U.S.A. has been ordered to proceed without delay to Wilmington, Del., and report in person for examination to Major General McDowell, President of the Retiring Board, convened by Special Orders No. 307, July 11, 1863, from the War Department.

Hospital Steward N. Hunter, U.S.A., has been relieved from duty at Lowell General Hospital, Portsmouth Grove, R. I., and will report in person to the commanding General, Department of the Pacific, for assignment to duty.

Surgeon John H. Rauch, U.S.V., now on duty in the Department of the Gulf, as Medical Director, 19th Army Corps, is relieved from duty in that Department, and will report in person without delay to the Surgeon-General of the Army, at Washington, D. C., for orders.

Surgeon James C. Fisher, U.S.V., recently restored, will report in person to the commanding General, Department of the Gulf, for assignment to duty.

Surgeon Gideon S. Palmer, U.S.V., now waiting orders at Carlisle Barracks, Pa., will report in person without delay to the commanding General of the Department of the Missouri, and by letter to Assistant Surgeon-General Wood, at Louisville, Ky.

Assistant-Surgeon Joel Leavens, U.S.V., recently appointed, will report without delay, by letter, to the commanding General, Department of the East, for duty at Fort Warren, Boston, Mass.

Assistant-Surgeon George L. Cornell, 1st Michigan Sharpshooters, hav-

ing tendered his resignation, is honorably discharged the service of the United States, upon condition that his record shall be clear upon the November and December rolls of his regiment, and that he shall receive no final payments until he has satisfied the Pay Department that he is not indebted to the Government.

At the request of the Governor of New Jersey, Assistant-Surgeon William W. Bowly, 2d New Jersey Cavalry, is honorably discharged the service of the United States, to date December 4, 1863, to enable him to accept an appointment as an officer in another regiment.

The following officers examined by a Military Board, and an adverse report thereon in their respective cases having been approved by the President, are discharged the service of the United States in accordance with Section 10, of the Act of Congress, approved July 22, 1861:—

Surgeon B. Bettelheim, 166th Illinois Vols.

Surgeon D. W. Robinson, 40th Iowa Vols.

Medical Inspector R. H. Coolidge, U.S.A., will at once repair to Knoxville, Tenn., and examine into and report upon the sanitary condition of the United States Troops, at or near Knoxville. Upon the completion of this duty, Medical Inspector Coolidge will at once return to this city, and report in person to the Surgeon-General of the Army.

Leave of absence for fifteen days has been granted Surgeon C. N. Chamberlain, U.S.V.

So much of Special Orders No. 564, current series, from the War Department, as discharged Surgeon John J. Marks, 18th Pennsylvania Cavalry, for physical disability and absence without leave, is so amended as to omit the charge of absence without leave.

The following changes have been made in the Purveying Department:— Surgeon Charles McCormick, U.S.A., Medical Director, Department of Va. and N.C., assumes the additional duties of Medical Purveyor of that Department, relieving Assistant Surgeon J. H. Frantz, U.S.A., who relieves Surgeon E. P. Morong, U.S.V., as Medical Purveyor, at Newbern, N. C.; Surgeon Morong to report for duty at Headquarters when relieved.

Surgeon Henry A. Martin, U.S.V., is relieved from duty at Pilot Knob, Mo., and will proceed without delay to Fort Monroe, Va., and report in person for duty to Major-General Butler, U.S.V., Commanding Department of Virginia and North Carolina.

Surgeon Gustavus Stegman, 6th U. S. Colored Troops, is relieved from duty in the Department of the Cumberland, and will report to the Surgeon-General of the Army in this city, for orders.

Surgeon S. G. J. DeCamp, U.S.A., has been relieved from duty at Watervliet Arsenal, N. Y.

An extension of ten days has been added to the leave heretofore granted to Assist.-Surgeon A. M. Parker, 1st Maine Cavalry, and Surgeon L. Holbrook, 18th Connecticut Vols.

Upon the recommendation of a Board of Officers, convened by Special Orders No. 285, June 27, 1863, from the War Department, Act.-Assist.-Surgeon Alexander B. Tabloek, 4th Tennessee Vols., is honorably discharged the service of the United States, on account of physical disability.

Surgeon D. W. Hartshorn, U.S.V., recently in charge of the Gayoso Hospital at Memphis, Tenn., is on leave of absence at Urbana, Ohio.

In addition to his duties as Health Officer, Surgeon Henry J. Churchman, U.S.V., has been assigned to duty as Post-Surgeon at Vicksburg, Missouri.

Assistant-Surgeon J. Q. Adams, U.S.V., has been relieved from duty at Las Cruces, N. M., and assigned to Fort Cummings, Arizona.

Surgeon J. E. Herbst, U.S.V., Surgeon-in-Chief, 2d Division, 12th Corps, Army of the Cumberland, has withdrawn his resignation, and is on leave of absence at Hagerstown, Md.

Surgeon Henry Buckmaster, U.S.V., has been assigned to duty as member of the Board for the examination of Surgeons and Assistant-Surgeons of Colored Troops.

Dr. Mills O. Carter of Massachusetts, has been appointed Assist.-Surgeon, 19th U. S. Colored Troops; and Dr. C. Miller of Washington, D.C., Assist.-Surgeon, 5th U. S. Colored Troops.

Assistant-Surgeon J. W. Applegate, U.S.V., has been assigned to the Field Hospital, Morris Island, S. C.

Assistant Surgeon Samuel Hart, U.S.V., has been relieved from duty with the 16th U. S. Infantry, and placed in charge of the 11th Division, General Hospital, Murfreesboro', Tenn.

General Hospital, No. 1, Vicksburg, Miss., has been closed; Surgeon L. C. Rice, recently in charge, is awaiting orders.

Surgeon A. P. Meylert, U.S.V., lately on duty as Medical Purveyor, at Louisville, Ky., has tendered his resignation, and is on leave of absence at Scranton, Pa.

Surgeon Howard Culbertson, U.S.V., has assumed charge of the Harvey General Hospital at Madison, Wis. Assistant-Surgeon Francis L. Town, U.S.A., recently in charge, has been ordered to report in person at the Office of the Assist.-Surgeon-General, at Louisville, Ky.

Surgeon J. L. Teed, U.S.V., has been relieved from General Hospital No. 1, and assigned to General Hospital No. 4, Chattanooga, Tenn.

Surgeon James McCormick, U.S.V., has arrived at Fort Monroe, Va., and entered upon his duties as Medical Director, Department of Virginia and North Carolina.

Surgeon Jabez Perkins, U.S.V., is in charge of General Field Hospital, Chattanooga, Tenn.

Assistant-Surgeon Charles F. Brisbane, U.S.V., has been assigned to duty with the 1st U. S. Cavalry, Reserve Brigade, Army of the Potomac.

Surgeon J. H. Taylor, U.S.V., to duty in charge of General Hospital, Summit House, Philadelphia, Pa.

Surgeon F. N. Burke, U.S.V., has been transferred from Jefferson Hospital Gatoysos Hospital at Memphis, Tenn.

Surgeon-General William A. Hammond, U.S.A., in stepping into his carriage at Nashville, Tenn., on the point of departing thence to Knoxville, Tenn., slipped on the steps, and fell, severely injuring his spine. He was confined to his bed when last heard from, his lower limbs being partially paralysed.

Surgeon Enoch Pearce, U.S.V., absent on sick leave, has been ordered before the Board in session at Cincinnati, Ohio, for the examination of sick officers.

Assistant-Surgeon William A. Banks, U.S.V., absent on sick leave, has been ordered before the same Board.

Surgeon William Varian, U.S.V., is on leave of absence at Hampton, Conn.

Surgeon C. F. H. Campbell, U.S.V., is on sick leave at Philadelphia, Pa.

Surgeon Jno. E. McDonald, U.S.V., is on sick leave at New York city.

A. P. Esselborn, of Cincinnati, Ohio, and Charles E. Sanborn, of Boston, Mass., have been appointed Medical Cadets U.S.A.

William Gardiner, of Philadelphia, Edward S. Fletcher, of Boston, Mass., James Blakey, of Kansas, Frederick Johnson, of Pennsylvania, Albert Gray, of Pennsylvania, Charles C. Bailey, of Massachusetts, Louis H. Nesmith, of New Hampshire, and Frederick Hignman, of Louisiana, have been appointed Hospital Stewards, U.S.A.

Surgeon George H. Oliver, U.S.V., has been assigned to duty at Mesilla, N. M., to relieve Surgeon William H. McKee, 5th Infantry California Vols., as Medical Purveyor of the District of Arizona.

Surgeon S. D. Turney, U.S.V., has reported for duty at Nashville, Tenn.

Surgeon H. A. Schlaeflin, U.S.V., is in charge of the Eruptive Fever Hospital, Baton Rouge, La.

Surgeon Geo. S. Courtright, U.S.V., has been assigned to duty at Fort Sumner, N. M.

Act. Assistant-Surgeon J. C. H. Hobbs, U.S.A., has been appointed Surgeon of the 12th Pennsylvania Cavalry.

Surgeon A. C. Schwarzwelder, U.S.V., has been directed to report to the Medical Director, Louisville, Ky.

Surgeon D. G. Brinton, U.S.V., has been assigned to duty as Medical Director, 11th Army Corps, Army of the Cumberland.

The U.S. General Hospital and Convalescent Camp, at Camp Nelson, Ky., will hereafter be known as the Nelson General Hospital and Nelson Convalescent Camp.

Surgeon L. C. Rice, U.S.V., has been ordered to report to the Assistant Surgeon-General at Louisville, Ky.

Surgeon S. W. Gross, U.S.V., is on leave of absence at Philadelphia, Pa.

Surgeon D. W. Hartshorn, U.S.V., has been ordered to report to the Medical Director at Louisville, Ky., for temporary duty while awaiting acceptance of his resignation.

Surgeon J. M. Robinson, U.S.V., has been assigned to duty as Surgeon-in-Chief, 2d Division, forces in Western Virginia.

Surgeon George S. Rose, U.S.V., has arrived at Santa Fé, N. M., and reported for duty at Brig.-General Carleton, commanding.

Surgeon B. B. Breed, U.S.V., has received permission to remain at Lynn, Mass., while settling his accounts as Medical Purveyor of the Department of North Carolina.

Surgeon J. H. Baxter, U.S.V., has been relieved from duty in the Campbell General Hospital, in this city, and will report in person without delay to the Provost Marshal-General of the United States, for special duty with Invalid Corps, relieving Medical Inspector R. H. Coolidge, U.S.A., who will thereupon report to the Acting Surgeon-General for duty.

The following assignments of medical officers have been made:—

Surgeon Cyrus N. Chamberlain, U.S.V., to report to the commanding General, Army of the Potomac, to relieve Surgeon Charles O'Leary, U.S.V., Medical Director, 6th Army Corps. Surgeon O'Leary, on being relieved, will report to the commanding General, Department of the Susquehanna, for duty.

Surgeon Charles L. Allen, U.S.V., to be relieved from duty as member of the Army Medical Board, now in session at Washington, D. C., and to report to the Major-General commanding Army of the Potomac, to relieve Surgeon Thomas Sim, U.S.V. Surgeon Sim, on being relieved, to report to the commanding General, Middle Department, for duty in General Hospital at Baltimore, Md.

Assistant-Surgeon R. W. Pease, U.S.V., now on duty at Baltimore, Md., to report to the Major-General commanding Army of the Potomac, to relieve Surgeon George L. Panoast, U.S.V., Medical Director, Cavalry Corps. Surgeon Panoast, on being relieved, will report in person to the Surgeon-General for orders.

Assistant-Surgeon A. B. Chapin, U.S.V., now on duty at General Hospital, Annapolis Junction, Md., to report to the Major-General commanding Department of Virginia and North Carolina, to relieve Assistant-Surgeon H. C. Parry, U.S.A. Assistant Surgeon Parry, on being relieved, to report in person to the commanding General, Department of the Susquehanna, for hospital duty.

Surgeon George Suckley, U.S.V., will proceed at once to Louisville, Ky., and report in person to Lieutenant-Colonel S. H. Lathrop, Assistant Inspector-General, 22d Army Corps, President of the Board convened by Special Orders No. 414, September 15, 1863, from the War Department, to relieve Assistant-Surgeon John T. Kelly, U.S.A., as a member of said Board.

Assistant-Surgeon Reilly, on being relieved, will report in person without delay to the commanding General of the Department of Missouri, for assignment to duty with the Army of Arkansas, and by letter to Assistant Surgeon-General Wood, at Louisville, Ky.

Surgeon Thomas McMillin, U.S.A., will report in person without delay to the commanding General, Army of the Potomac.

A Board, to consist of Colonel William H. Brown, Invalid Corps, and Surgeon J. H. Baxter, U.S.V., is appointed to meet on the 6th inst. at Convalescent Camp, near Alexandria, Va., for the purpose of examining all men sick at said Camp, with a view to their being sent to their regiments, transferred to the Invalid Corps, discharged, or sent to General Hospitals as may be proper. The Board will be governed by General Orders No. 112, Adjutant General's Office, of 1863, and in their selection of men and organization of Invalid Companies by such special instructions as they may receive from the Provost Marshal-General. The commanding officer of the Convalescent Camp will afford to the Board every facility in his power, in selecting and organizing Invalid Companies. Such enlisted men as may be found by the Board unfit for field service, or not proper subjects to be sent to General Hospital for treatment, and unfit for the Invalid Corps, will be discharged by the Department Commander on surgeon's certificate of disability. All men found fit for field service will be at once forwarded to their regiments.

A Board of Officers is convened to assemble in Washington, D. C., on Tuesday, January 12, 1864, at 10 o'clock, A.M., or as soon thereafter as practicable, for the examination of Officers of the Invalid Corps, and of candidates for appointment into the Corps. The Board will be governed by such regulations and instructions as may be prescribed by the Provost Marshal-General. Detail for the Board, Surgeon J. H. Baxter, U.S.A.

Medical News.

DEATH OF DR. EUGENE O. ROWE, M.D.

DEPARTMENT OF PUBLIC CHARITIES AND CORRECTION,
No. 1 BOND STREET, NEW YORK, Jan. 12, 1864.

At a meeting of the Commissioners of Public Charities and Correction, held this day, at the Office—present, Commissioners Draper, Bell, Nicholson, and Grinnell—the following resolutions were adopted:—

Resolved, That the Commissioners of Public Charities and Correction learn with deep sorrow the death of Dr. E. O. Rowe, House Surgeon at Bellevue Hospital, and tender our sincere sympathies to his family and friends.

Resolved, That a copy of the foregoing be transmitted to the family of the deceased.

Extract from the minutes.

JOSHUA PHILLIPS, Clerk.

BELLEVUE HOSPITAL MEDICAL COLLEGE.—At a meeting of the Class, held in the College Hall of the Bellevue Hospital Medical College, on Wednesday, Jan. 13, 1864, a Committee was appointed to draft resolutions, of which the following is a copy:—

B. C. GOODRICH, Jr., Secretary.

BELLEVUE COLLEGE, Jan. 13, 1864.

Whereas, It has seemed good to Almighty God to call from life, while in the earnest performance of his duties, DR. EUGENE O. ROWE, member of the graduating Class, and connected with the Medical Staff of Bellevue Hospital; therefore, we, the members of the Class, in token of the heartfelt respect and appreciation in which we hold his memory, do hereby resolve.

1st. That we are called upon to mourn the loss of one whose rare talents, whose zeal and industry, and whose enthusiastic love of science had already borne fruit in an opening career of usefulness, and who, had life been spared him, promised to stand in the foremost rank of the profession of his choice.

2d. That in his death we recognise and applaud the rare fidelity with which he devoted himself to his duties, the unselfish spirit which made him ever ready to watch and labor for the sick and suffering, and the Christian heroism which rendered him indifferent to his own danger while contributing to the relief of others.

3d. That we offer our warmest sympathy to the bereaved family of the deceased.

4th. That, as a last tribute of respect to his memory, we will attend his funeral in a body.

5th. That a copy of these resolutions be sent to the family, and that they be furnished the AMERICAN MEDICAL TIMES and the daily papers for publication.

W. M. CLARISON, JR., Chairman.
W. T. Lusk,
JAMES T. YOUNG, } Committee.
L. L. TOZIER,

At a meeting of the Bellevue Medical Union, composed of the Hospital Staff, held Jan. 13, 1864, the following resolutions were unanimously adopted:—

Whereas, It has pleased God, through pestilential disease, to deprive us of the kind presence of our dear friend and colleague, DR. EUGENE O. ROWE.

Resolved, That we bear witness to his superior talents, his cultivated mind, and the high sense of honor which prompted him to sacrifice his life in the performance of professional duty with the cheerfulness of one who did not fear to die.

Resolved, That we shall ever love to remember the endearing qualities of truth, manhood, and gentleness which blended to form his character.

Resolved, That we desire to express our warm sympathy with the family of our dear friend and brother, feeling that their loss is ours, and praying that they may find consolation in Him who is able to bind up that which hath been broken.

EMILIO L. MCILA, M.D.,
S. D. WADSWORTH, M.D., } Committee.
GEORGE ENGEL, M.D.,

DEATH OF DR. JAMES W. DICKIE.

At a meeting of the Medical Staff of the De Camp General Hospital, at David's Island, N. Y. H., held on the evening of January 5, 1864, the following preamble and resolutions were unanimously adopted:—

Whereas, It has pleased Almighty God to remove by death our late associate Dr. James W. Dickie, a member of the Medical Staff of this Hospital, therefore be it

Resolved, That in his death we feel that this Hospital has lost a most efficient medical officer; the profession an enthusiastic and untiring disciple; and the medical staff a friend, whose memory we shall cherish with feelings of profound respect.

Resolved, That we do hereby tender to the afflicted family of the deceased our heartfelt sympathy in their bereavement.

Resolved, That the members of the Medical Staff of this Hospital, as a public testimonial of regard and respect for the memory of our deceased friend, wear the usual badge of mourning for ten days.

Resolved, That a copy of these resolutions be transmitted to the bereaved family, and, also, that they be inserted in the New York MEDICAL TIMES.

On behalf of the Staff,

GEORGE BANGER, M.D.,
A. NORTON BROCKWAY, M.D., } Committee.
W. C. FRYER, M.D.,

DE CAMP GENERAL HOSPITAL, January 6, 1864.

Lecture.

REMARKS ON THE
RECENTLY PROPOSED AMERICAN PLAN

OF

TREATING GUNSHOT WOUNDS OF THE CHEST BY "HERMETICALLY SEALING."*

By T. LONGMORE, DEPUTY INSPECTOR-GENERAL,

PROFESSOR OF MILITARY SURGERY, ARMY MEDICAL SCHOOL.

A PLAN of treating chest wounds has been lately brought to notice in the *AMERICAN MEDICAL TIMES* by Dr. B. Howard, of the United States Army, which is called by its author the "treatment by hermetically sealing;" and the editor states it to be understood that at the next engagement of the army of the Potomac an hospital is to be organized, under charge of Dr. Howard, for the sole purpose of treating gunshot wounds of the chest by the sealing process. Dr. Howard advocates the propriety of this treatment for all penetrating wounds of the chest by gunshot. He also describes it to be applicable to penetrating wounds of the abdomen, whether made by gunshot or stabbing instruments.

The following is a description, in Dr. Howard's own words, of the manner in which the operation of hermetically sealing is to be practised:—

"All accessible foreign bodies having been removed, introduce the point of a sharp-pointed bistoury perpendicularly to the surface just beyond the contused portion, and, with a sawing motion, pare the entire circumference of the wound, converting it into a simple incised wound of an elliptical form. Dissect away all the injured parts down to the ribs, then bring the edges of the wound together with silver sutures, deeply inserted, at not more than a quarter of an inch apart; secure them by twisting the ends, which are then cut off short and turned down out of the way. Carefully dry the surface, and with a camel's hair pencil apply a free coating of collodion over the wound; let it dry, and repeat it at discretion.

"For greater security, shreds of charpie may now be arranged crosswise over the wound, after the manner of warp and woof; saturate it with collodion, and when dry repeat the process, until the wound is securely cemented over. As a still greater protection, a dossil of lint may then be placed over the part and retained with adhesive straps.

"If there be a tendency to undue heat in the part, it may be kept down with cold affusion; should any loosening of the dressing occur, an additional coating of collodion may be applied. The sutures must not be removed until healing by first intention is complete.

"Should suppuration occur, so as to occasion distressing dyspnoea, proceed to treat it in all respects as a case of empyema, introducing the trocar at the most dependent point, and taking special care to avoid the admission of air."

Dr. Howard describes particularly three advantages which are gained by this perfect closure of the wound. 1st. Hæmorrhage is controlled. At the worst, he says, the amount of blood lost after the operation cannot be more than would suffice to fill up the unoccupied space remaining in the pleural cavity; the elastic clot resulting furnishing a styptic *par excellence* for the wounded vessels of the yielding lung. 2d. Dyspnoea is immediately relieved upon removal of the atmospheric pressure. 3d. Suppuration, if not prevented, is greatly diminished by shutting out the

constantly renewed currents of atmospheric air, and its character is very favorably modified. "Indeed, if the wound were closed soon enough," says Dr. Howard, "I deem it possible that the slough of the track through the lung, with the limited amount of attendant pus, might be entirely disposed of by absorption and expectoration."

As a proof of the successful results of the sealing plan of treatment, Dr. Howard mentions that some cases upon which he operated were six days in the ambulances before reaching a General Hospital, part of the road travelled over being of the worst description; on the fifth day all but one of these so treated were able to walk comfortably.

In considering the proposed treatment, what first attracts notice is the absence of any limitations in its application, and the assumption that healing of the wound by the first intention can be secured in all such cases. It is the unqualified manner in which this plan of treatment is put forth that makes me think it important to notice it; for if put into practice as described, I feel certain it must lead not only to much disappointment, but occasionally do considerable harm. The wounds of the chest to which it is to be applied are simply designated "penetrating wounds," but it is obvious from Dr. Howard's remarks that he includes perforating wounds, and indeed all wounds in which the cavity of the chest is opened by gunshot, with or without wound of the lung. As I have already explained, the variations which are constantly found in the accompanying circumstances of a number of wounds of the chest by gunshot involve corresponding variations in their degrees of gravity and probable issues. The difference between an ordinary penetrating wound by gunshot, and a perforating one, is immense; in the one case the projectile is probably lodged; in the other it has passed out. Again, in either a penetrating or a perforating wound, most important differences arise in the nature of the injury and the effects of the treatment, according as the lung is penetrated or not; and serious differences also depend upon the part of the lung penetrated or traversed by the ball. All these circumstances should be noted and taken into account in estimating the value of a special plan of treatment in a given number of cases. If a ball passes through or near the root of the lung, it is scarcely possible to prevent a fatal result by any plan of treatment; if the track of the ball has been limited to the periphery of the lung, and the constitution of the patient and opportunities of treatment be favorable, we have a right to expect a favorable cure in a considerable proportion of cases under the mode of treatment which has hitherto been in ordinary use of late years, and which I have already described to you.

The surgeon's efforts to secure healing by the first intention in the way named in gunshot wounds will, I think, be attended with success in only a very small proportion of exceptional cases. It is the rule of practice among army surgeons to close completely, by sutures, compresses, adhesive plasters, and bandages, all wounds of the chest—such as incised and stabbing wounds—in which there is thought to be a probability of union by the first intention being obtained. Not only the relief to the breathing by rendering more complete inflation of the lungs practicable—which is the immediate effect of this operation in an incised wound of the soft parietes of the chest and periphery of the lung,—but the arrest of the hæmorrhage (if this complication exist), together with the prevention of subsequent extended pleuritis and pleuro-pneumonia, are sought to be obtained by these means. And as in many cases the urgent symptoms have gradually abated under this treatment, and eventually respiration in the wounded lung been re-established, it has been rendered evident that the wounds had become closed by the adhesive process. You will find such cases fully recorded in the works of Guthrie, Larrey, Hennen, and others. But in treating cases of incised wounds we cannot rely upon obtaining healing by adhesion even of the external orifice, although this may be uncomplicated with injury or cartilage; and we should be prepared to meet these abortive attempts by

* Being part of a Lecture delivered at the Army Medical School on the sixteenth of December, 1863.

† Treatment of Gunshot and Penetrating Wounds of Chest and Abdomen by Hermetically Sealing. By B. Howard, M.D., Assistant-Surgeon U.S.A., Surgeon-in-Chief, Artillery Brigade, Fifth Corps, Army of the Potomac. Camp on Rappahannock, Va., Sept. 14, 1863. In a communication to the *American Medical Times*, No. 14, vol. vii., p. 156.

other definite plans of treatment. The restlessness of the patient, the natural movements of the chest in respiration, inflammatory action, cough, weakened health, habits of life, and special conditions of the tissues, may thwart our attempts to effect this object. When to these sources of failure we add continued hæmorrhage at the seat of injury in the parietes, and torn cartilage or divided ribs—such frequent concomitants of these injuries,—the difficulty of obtaining healing by the first intention is still further increased.

When we leave incised wounds and approach those of penetrating gunshot wounds—at least those inflicted by projectiles as large as ordinary musket-balls,—the probability of obtaining healing by the first intention seems to be altogether absent. Here not only all the ordinary sources of prevention of this desired result which I have just mentioned exist in an aggravated degree, but, in addition, a rib, when struck, is not simply divided as by a sword, but is contused and splintered, and the soft parts around the opening made by the ball, for a distance varying according to the size and shape of the projectile, and its amount of momentum, are bruised, and their vitality and reparative tendency proportionately diminished. To remove this splacelated surface and surrounding bruised structures by incision, and then to force the edges of this enlarged opening together by sutures (for it is to be remembered, even in cases where ribs and their cartilages have escaped, the intercostal muscular tissues and pleura—not merely the integument—are contused and torn), appears to involve the necessity of such a strain as would prevent all probability of cohesion by first intention, even if such further impediments as costal movements, sudden impulses by coughing, and symptoms of inflammation arising, were not in existence. Experience has hitherto taught that in these injuries provision must be allowed for the escape of sloughs and suppurative discharges from the parietal wounds—not to mention other circumstances; and that to pen them up by closed compresses is to thwart nature's plan of attempting cure, and to aggravate the evils which have been already inflicted. Hence the rule has arisen in all cases of *incised wounds* of the chest, whether hæmorrhage be present or not, to close the wound by suture and compress as early as possible, and to seek for union by adhesion; but in *gunshot wounds*, not to close by suture, and only to make accurate closure a matter of necessity where they are accompanied by active hæmorrhage.

Baron Larrey, in his memoirs of the Egyptian campaign,* has given an excellent explanation of the manner in which the urgent symptoms of an incised wound of the lung with hæmorrhage, when the hæmorrhage arises wholly from the pulmonary vessels, are frequently caused to cease, if the wound in the chest be accurately closed. While the wound is open, the inspired air, finding a ready way of exit by the opening in the lung, constantly opposes the cohesion of the margins of this opening, at the same time that its escape in this way prevents the distension of the air-cells of the surrounding lung-structure, which would lessen the arterial flow, and accelerate the return of the blood by the pulmonic veins. When the wound in the chest has been accurately closed, after allowing the blood already effused in the pleura to escape through the opening by favorable position, the air introduced into the lung by breathing, not finding the same way of issue, fills more completely the small bronchial tubes and air-cells, facilitates the return of blood to the heart, causes the divided lung surfaces to approach each other, favors the contraction of the orifices of the wounded vessels, and assists by these means, as a consequence, the adhesive process. But in the case of a contused and ragged canal being opened through the lung by a projectile passing into or through it, all the circumstances are manifestly changed: if bleeding is going on from its surface, neither the passage of the air through the wound in the chest-wall

nor its restraint can exert influence upon it, for the track of the ball will remain patulous under all circumstances, so far as the act of respiration is concerned.

Let me briefly consider the three advantages which Dr. Howard advocates for the hermetically sealing treatment in gunshot wounds. Dr. Howard states the causes of fatality in gunshot wounds, of the lungs to be hæmorrhage, dyspnoea, and suppuration; and that these may be restrained and modified, if not prevented or removed, by the simple operation already described.

Hæmorrhage, Dr. Howard rightly places first amongst the causes of fatality. It is the symptom which of all others alarms the surgeon; for he cannot but feel how much the power of nature to arrest the flow of blood, and how much the result of his own endeavors to aid nature in her efforts, must depend upon accidental circumstances connected with the course of the projectile and the injuries it has inflicted, which it is entirely out of his power to control. The track of the bullet is out of sight; the injury it has done to the lung is out of reach. It may be judged that vessels of the largest size have not been divided as it traversed the viscus, or death would have been nearly instantaneous: a surmise may even be made of the part of the lung wounded by the situation of the aperture of entrance, or, if two openings exist, by a supposed line connecting them. But such surmises are often proved to be erroneous by post-mortem inspection; even the source of the hæmorrhage, whether it be wholly pulmonic or wholly parietal, or the two combined, cannot be diagnosed with certainty in these complicated wounds. It is not to be wondered at, then, that under such circumstances of doubt and consciousness of helplessness, surgeons, though recognising the differences between a gunshot and an incised wound of a lung, should nevertheless, almost instinctively, stop the gap through which the life-blood of the patient is seen to be flowing. Although the surfaces of the wound in the lung cannot be brought into contact and coaptation, there is still the hope that as the blood accumulates within the pleura, it may exert such a pressure upon the wounded lung, and, perhaps, so plug up the mouths of the open vessels, as to stay the flow of blood, and procure time for the saving processes of nature and the application of remedial measures on the part of the surgeon that may lead to the recovery of the patient. And the most experienced army surgeons have long recommended this course under circumstances of gunshot wounds with *profuse hæmorrhage*. "Hermetically sealing," thus applied, is only a new term: the practice is not new. Immediate closure of the wound is, at the present day, the general practice of all surgeons in such cases. The difference in the treatment between the practise of *closure* and *hermetically sealing* is, that in the one no attempt is made to obtain healing of the wound by the first intention, which it is not expected can be obtained in openings made by gunshot; and, secondly, that the continuation of the closure is made subject to other contingencies which are not unlikely to follow the injury. It frequently happens in such cases that the flow of blood, after the closure, is not arrested until the accumulation on the wounded side is so great that the pressure exerted upon the heart and sound lung is strong enough to threaten death from asphyxia. It is manifest under such circumstances that the wound cannot be kept hermetically sealed; it must be reopened, some of the effused blood allowed to escape, and there still remains the hope that the weakened state of the circulation, and the usual condition consequent on loss of much blood, with the aid of proper remedial measures, may favor the prevention of further hæmorrhage. If we persist, under these circumstances, in maintaining the hermetically sealing of the chest,—if Dr. Howard's injunction that the sutures are not to be removed until healing by the first intention is complete, is attempted to be carried out,—I fear the risk will be run of causing the death of the patient by suffocation.

Dyspnoea is a symptom which may depend on several causes. It may be induced by the very circumstance I

* Mémoires de Chirurgie Militaire, tome II., p. 155. Paris, 1812.

have just described, after closure of the wound—viz. continued hæmorrhage and accumulation of blood in the cavity of the chest, and sealing will not then afford relief: if it depend upon the interference with natural respiration such as has been described to exist in incised wounds of the lung, hermetically sealing might afford relief if there were no complication, and the sealing could be maintained long enough. This continued sealing, however, it is believed, the circumstances connected with the discharges, and other consequences of gunshot wounds, will not admit of. But supposing that for the relief of this symptom the chest has been hermetically sealed, an irregularly torn lung, or a lung with the open track of a ball through it, will almost certainly give rise to pneumothorax, and the continued escape of air into the cavity will cause such compression on all the contents of the chest as to aggravate the dyspnoea extremely, and cause imminent danger to life from suffocation. In such a case, again, the wound must be reopened, or another opening practised by the trocar, to afford relief.

Lastly, Dr. Howard advances that *suppuration* is greatly diminished, if not prevented, by shutting out external air. This is doubtless the case with incised wounds, but can we expect it to be with penetrating gunshot wounds? An uncomplicated wound of this kind, without hæmorrhage, without lodgment of foreign bodies, is unfortunately rare indeed, and such complications can scarcely fail but lead to pleuritic effusion and empyema. If the hæmorrhage be slight, the blood may be absorbed; but if it be in its usual quantity, and not evacuated, it will irritate the serous sac, and produce the same effects as other foreign bodies. Mr. Guthrie's experience in the Peninsular War led him to state, that in cases in which there was not a free communication between the wound in the parietes and the cavity of the chest, pleuritic effusion was the principal danger to be feared. "When the external wound," Mr. Guthrie says, "has been closed, or is so partially closed as not to allow the escape of the effused fluid, it is commonly the immediate cause of the death of the patient. Its secretion and early evacuation are, therefore, the most important points to be attended to in wounds of the chest."*

I have thought it right to consider this subject at some length because I fear, if penetrating gunshot wounds of the chest are treated indiscriminately by hermetically sealing the external wound or wounds, a fatal termination will be induced in some cases which might terminate otherwise under the more ordinary methods of treatment. But if my fears in this respect should be proved to be groundless, and practice shall bring to light an improved method of treating these serious injuries, military surgery will be greatly indebted to its author; for it is undoubtedly unhappily most true that hitherto, in all campaigns, the proportion of fatality in really penetrating and perforating wounds of the chest has always been excessively large. I believe the proportion of fatality would even appear greater than it does in some tables if the diagnosis were more accurately made in the various hospitals from the combined returns of which such tables have been composed. Easy as one might at first suppose to be the diagnosis of a musket-ball wound of the chest, whether penetrating or non-penetrating, experience shows that it is not so. Partial circuits of balls beneath the integuments and the muscles of this region, beneath the scapula, perhaps complicated with great bruising, fracture, hæmorrhage, and attended with dyspnoea, hæmoptysis, and faintness, deceive the unwary at once into the belief that the chest must have been opened and traversed by the ball when the pleura has escaped entire. The circumstances of field hospitals for some time after a battle too often add to the chances of inaccurate diagnosis of particular wounds, and errors, once made, are not likely to be changed in the tabular returns, although the nature of each case may be more truly arrived at in the secondary or general hospitals, through which the patients subsequently pass. I have repeatedly seen cases returned as *penetrating wounds*, in which I have been able to demonstrate satisfac-

torily that the cavity of the chest has not been exposed at all. You will find several such cases described by me in the last volume of the "Army Medical Reports," under Wounds of the Chest. If, as has been stated, a field hospital should be established in America for the reception of gunshot wounds of the chest, and the cases be submitted to the treatment I have been commenting upon, it is especially to be hoped that the diagnosis in each case shall be in the first instance established and defined as accurately as possible, so that the value of the observations made on the effects of this treatment, and of the tabular deductions as to its final results, may not be impaired by any doubts as to the nature of the series of cases which have been subjected to it.

No pains appear to be spared by the authorities in America to encourage professional investigations of this nature; and under the able direction of the energetic Surgeon-General, Dr. Hammond, and from the observations of the hundreds of medical officers who are laboring in the immense field of campaigning practice which is now afforded in that country, we have every right to expect that great advances will be made there in the science of military surgery.

Original Communications.

THE

INDICATIONS FOR THE USE OF STIMULANTS IN THE TREATMENT OF TYPHOID FEVER,

BEING AN ABSTRACT OF REMARKS MADE

By HANBURY SMITH, M.D.,

AT A MEETING OF THE NEW YORK COUNTY MEDICAL SOCIETY, DEC., 1863.

DISCLAIMING any recommendation of routine practice, Dr. Smith thought that every experienced physician would gladly welcome any ready method which should save his so often outworn mind, if it were ever so little, of the laborious exertion which conscientious individualization of cases demands. He therefore ventured to call the attention of the Society to the researches of Stokes, and the rules founded thereon, especially as simplified by Huss. Was surprised not to have heard mention of these rules during the discussion, either to dispute their correctness or to corroborate them; the more especially as the admission seemed to be universal, that the pulse and the general condition were fallacious guides in some cases. After twenty years of experience in their application, the Doctor considered the rules proposed as not only safe guides in general, and even in other diseases beside the typhous fevers, but as great labor-savers, especially valuable in hospital practice and in epidemics, assisting individualism, but by no means rendering that duty supererogatory.

As long ago as 1839, Stokes published his researches on the use of wine, and the state of the heart in fever; as a result of which he lays down the rule, that "in the progressive failure of the impulse, in the diminution and extinction of the systolic sound, in that condition of the heart in which its sounds resemble those of the fœtus in utero, we have distinct and easily ascertainable indications for the use of wine, and an assurance that in most cases the remedy will be successful." Stokes also expresses his belief that attention to the commencing failure of the heart's power, as revealed by auscultation, will enable us to anticipate the general prostration by freely resorting to wine, even when the strong pulse, urgent thirst, and vivid redness of the macule would seem to counter-indicate the remedy. It is not asserted that the heart always shows signs of loss of power in exact ratio with progressive adynamia; on the contrary, it sometimes remains unaffected in extreme cases, yet where stimulants freely administered prove eminently useful. So also there occur cases of ex-

* Commentaries on Surgery, 5th edit., p. 382.

trema adynamia with violent excitement of the heart, but in these cases stimulants, however freely administered, are of no avail. This last singular exception, Dr. Smith suggested, may possibly be due to an anomalous condition of the blood, which some post-mortem examinations have shown to be inspissated, or thickened, instead of, as more commonly found, "dissolved," or unnaturally fluid and defibrinated. The collapse stage of Asiatic cholera, in which there is extreme inspissation of the blood, affords us a somewhat analogous state of things, where also the too free use of stimulants only the sooner exhausts the powers of the already overburdened heart. What is wanted in such cases is the discovery of some mode of treatment which shall restore to the blood a density more nearly normal, and Dr. Smith puts the query if it be not exactly in such cases that the saline treatment of Dr. Stevens is indicated? It is difficult to believe that Dr. Stevens, and others, have been entirely deficient in powers of observation, however faulty the theoretic grounds on which they founded their practice; and it is quite probable that certain salts, or combinations of salts, may possess the property of, at least for a time and *in transitu*, as it were, altering the consistence of the circulatory fluid for the better. If so, a temporary improvement would be likely to follow their administration, and while they can hardly be supposed to exert any curative influence, in the true sense of the term, least of all in self-limited diseases, yet just in such cases mere prolongation of the struggle against death renders more probable the victory of life. Dr. Stevens's treatment deserves, therefore, a new trial, but only in the anomalous forms of fever above alluded to, where, with progressive adynamia, there is increased violence of the heart's action. Dr. Stevens gave seven grains of chlorate of potassa, twenty of chloride of sodium, and thirty of bi-carbonate of soda, in half a tumbler of water, about every two hours. Dr. Smith would consider it far preferable in fever cases to give the chlorate only, in artificial highly effervescent Vichy water, which contains twenty-five grains of carbonate of soda in the pint, and to give it in smaller doses, more frequently repeated, at least as often as every hour, in fact as often as practicable, without exhausting the patient by too much disturbance. Seltzer water, containing seventeen grains of common salt, six of bi-carbonate of soda, and one of phosphate in each pint, would be likely to prove the best of vehicles for stimulants, or might in some cases be substituted for the Vichy.

The proposition of Huss, founded on independent and very extensive observation, is, that as soon as the first sound of the heart is shortened, so as to resemble the second, the pulse at the same time losing its fulness, stimulants are positively required; and their doses and frequency of exhibition are thenceforward to be regulated by the state of the heart alone. If under their appropriate administration the first sound recovers its normal prolonged character, the necessity for stimulants diminishes as it does so. But if, on the other hand, after having been so shortened as to be indistinguishable in character from the second—thus closely imitating the sounds of the foetal heart—the first sound gradually ceases to be heard altogether, the pulse in the meantime becoming thready, the necessity for stimulants in increasing quantities, and at shorter intervals, becomes more and more imperative.

These signs of progressive weakening of the heart's action, probably coincident with a progressive softening of its substance, sometimes proceed so far that neither first nor second sound is audible, the pulse, though excessively feeble, being commonly perceptible. The case is still not hopeless; no case of fever is while life remains.

In hospital practice Huss did not use alcoholic stimuli to any extent, but relied mainly on medicinal. Thus with commencing adynamia, he prescribed diluted phosphoric acid in doses of twenty drachms and upwards, as soon as the first sound of the heart began to shorten. When that sound became indistinguishable from the second, and both feeble, one or two grains of camphor, always in emulsion,

may be appropriately combined with the phosphoric acid aforesaid, or, where there is considerable diarrhoea, infusion of ipecac. Finally, on the entire suspension of the first sound, when the pulse will be barely perceptible, the patient plucking at the bed-clothes, with mumbling delirium and *subsultus tendinum*, musk is indicated, not in the trifling doses too often prescribed, but from three to five grains, with one of camphor, every two hours, until heart-sounds and pulse return, when it may be gradually suspended.

A pupil of Huss, and practising among the wealthier classes of a people in the habit of very freely indulging in alcoholic stimulants, Dr. Smith early recognised the necessity of not suspending too suddenly and completely the habitual drams, and found the rules just mentioned of the greatest practical value as guides in administering them. As regards choice of liquors, Dr. Smith thought the following rules deserving of consideration. When the patients have not been in the habit of using distilled liquors, wine should be used so long as it is tolerated by the stomach, good Port, not too old, being probably the best, as being rich alike in tannin, sugar, and alcohol. Effervescing wines, like champagne, allowable as the first form of alcohol, soonest disagree. When the stomach no longer tolerates wine, the distilled liquors come into play, or may sometimes with advantage alternate with wines. If the patient have habitually used considerable quantities of any particular form of alcoholic drink, that one is best for him so long as moderate doses produce the desired effect; but when it begins to lose power another form may be substituted, with the important advantage gained of effecting the same amount of stimulation with less injection of alcohol, just as changing from one salt of morphia to another enables us to keep up the narcotic influence with a smaller expenditure of the active base.

Alcohol not being food, but a stimulation of those vital changes causing waste, the more urgent is the necessity to replace that waste, lest the solid organism be called upon to supply more than it can afford, without damage to its integrity; hence the positive necessity of the regulated administration of food, which Dr. Smith considered as not second to any other consideration in the treatment of the typhoid fevers. Dr. Smith argued also that if too little variety in diet will, under certain circumstances, impair the digestive vigor of the strongest, how much more must the weak stomach of the fever patient suffer from the dosing at regular intervals with the unchanging mawkish gruel, or panada. Variety of well-cooked and savory fluid, or semi-fluid food, is absolutely essential. At the same time, commencing with the simplest forms, it should gradually increase in concentration of alimentary principles, yet carefully preserving its digestibility as the vital powers decline, reserving the extractum carnis, Liebig's beef-tea, gravy of underdone meat, etc., as the last resorts of dietetics, alongside of the heroic use of alcohol, musk, and camphor.

Alluding to the very interesting experiments of Chossat on inanition, Dr. Smith thought that his results were susceptible of many indications of great practical value in the dietetic treatment of disease in general, and therefore worthy of consideration, perhaps, on this occasion. Chossat found that when insufficient food was given for a length of time, the animal gradually *lost the power of digesting even the small amount allowed*, a part being rejected by vomiting, or passing off by diarrhoea; the vital power being reduced too low to form an efficient gastric juice, or the materials being deficient, or both. This explains the loathing of food in prisons and poor-houses with an insufficient diet-scale, often punished as unnecessary fastidiousness—a very grim joke indeed. Nor should we lose sight of the cause of predisposition to disease, as well as reduced power of recuperation from it.

In addition to the temporary loss of digestive power, Chossat found that after a certain persistence in insufficient feeding, the stomach could *never recover its power of di-*

gesting, however carefully nursed with gradually increasing portions of food, death ensuing. But from another series of experiments it appeared that artificial warmth restored the dying animals even from a state of insensibility and want of muscular power, to comparative activity. Their temperature rose, they flew about the room, took food, and, if not again starved, most recovered. If left to themselves too early, however, digestion was not performed, and they died. The secretions were renewed, but the power of generating heat did not return until digestion had actually taken place, often many hours after the injection of food.

Although many hints for the dietetic treatment of fever, and especially convalescence therefrom, may be taken from these results, Dr. Smith had rather dragged them into the discussion, because of the painful illustration they are daily receiving in our midst; whether our soldiers be too long restricted to "short rations," be deprived of wholesome not to say necessary variety, or, *miserabile dictu!* be slowly starved to death as prisoners of war. From the preceding observations it is but too evident that while nothing but abundance and variety, together with ample artificial heat, can save numbers from certain death, that fate too surely awaits those who may too late receive the former, unless accompanied with the latter.

ULCERATION OF THE STOMACH.

By GEORGE BAYLES, M.D.,

ACTING ASST. SURG. U.S.A., CHESAPEAKE GENERAL HOSPITAL, FORT MONROE, VA.

HOSEA CASE, æt. 19, private, Co. E, 16th Conn. Regt., was attacked with the typho-malarial or "Peninsular fever," while with his command on the march to "White House Landing." Patient was sent to Fort Monroe, and entered Chesapeake Hospital, July 2d, 1863. Although extremely prostrated by the fatigue of the journey, made under such disadvantageous circumstances, he rapidly recovered, and on the 26th July was sent into convalescent quarters for duty, with the hospital guard. He remained thus on duty until Oct. 2d, when he reentered his former ward for treatment for diarrhoea. His malady yielded readily enough to treatment, although it kept recurring from time to time, at short intervals, which might possibly have been owing as much to indiscretions in diet—surreptitiously enjoyed—as to any peculiar irritability of the bowels. From about the 24th of Oct. to Nov. 17th, patient was comparatively well, at all events quite convalescent, and was looked upon as one nearly ready to resume his duties in the field.

On the evening of Nov. 17th, patient had a paroxysm of retching and vomiting, which was regarded as simply the sickness of indigestion, and treated accordingly. On the 18th patient had several attacks of vomiting, and a saline laxative and topical palliatives were employed. For days the emesis continued, lasting for about two minutes at intervals of an hour or two. The vomited matter was watery, and had the appearance of dirty dish water, though not a great deal was ejected at a time, perhaps not more than three ounces. On the 22d, as the vomiting had not ceased, or even abated, more vigorous efforts were made to control it. Opium in pill form was given, and occasionally creasote in mucilage was administered, which seemed to moderate somewhat the anti-peristaltic action. After a period of laborious and exhausting retching, I administered on the 23d the following preparation, with much apparent benefit:—

R. Chloroform. ʒij.
Tinct. Aconiti ʒiss.
" Opii camph. ʒss.
Aquæ ʒij. M.

Dosis. Cochl. mod. omni horâ, si op. sit.

for the intervals of rest became more frequent, and of longer duration. Warm fomentations were placed upon the epigastrium to relieve the muscular soreness arising from the protracted emesis, and which began now to be very sen-

sibly felt and much complained of. The patient was kept upon a strictly low diet, composed chiefly of thickened milk, gruel, and "essence of beef." Stimulation was allowed through the medium of milk punch, which he seemed to tolerate better than any other preparation of liquor.

On the 24th patient seemed much better, and the above described treatment was continued without deviation. At the evening visit to my ward, on the 25th, the nurse acquainted me with the fact that patient had had, about an hour previously, a violent attack of nose-bleed, but that by a little management, such as elevating the head and shoulders, pediluvia and cold to the spine, it had been easily checked. A little of the syrup of the iodide of iron was then, for a time, administered, but was so constantly rejected that it was discontinued, and the former remedies resumed. The epistaxis never recurred, however, but on the 26th I discovered in the vomited matter and sputa, traces of blood, having a bright fresh appearance, also some little clots having a duller color. This I was inclined to attribute to the supposed fact of some slight hæmorrhage from the nasal passages. The patient would cough occasionally and expectorate, and blood stains would collect upon the bedding, making a frequent change of clothing necessary, in order to preserve cleanliness.

On the 27th blood stains still showing themselves, and more abundantly, while the hæmorrhage from the nose had entirely subsided, I invited Dr. W— to examine the case with me, the stethoscope being used in view of ascertaining the precise condition of the lungs. These organs were, after a careful examination, thought to be sound and healthy. The pain which was now complained of was traced to its limits, in all directions, and was found to be embraced within the epigastric and left hypochondriac regions. These parts had now become exceedingly sensitive to pressure. On consultation it was decided to continue the opium pills, and the sulph. morph. in doses of one-eighth of a grain in sol., together with the "spoon diet," and the use of pellets of ice to be swallowed very frequently, allowing them to be dissolved in the stomach. It was also deemed advisable to exhibit two grains of tannic acid, with water, every hour.

We now felt that beyond a doubt we had an ulceration of the mucous lining of the stomach to deal with.

On the 28th, patient complained of weakness, and some pain in the abdomen. Bowels moved freely; and although the stool was of a dark and blackened color, as was also the villous coating of the tongue—owing principally to the tannin—yet no traces of blood were discovered in the fæces. Vomiting was less frequent this day than for four days previously, and occurred at the time of taking nourishment, which was as often as six times in the twenty-four hours. On the 29th patient was much the same, perhaps weaker. Stimulants for two days past had been avoided, as they seemed incompatible with the hæmorrhagic condition of the stomach; and although tried occasionally—*experimentally*—with the hope of reviving the flagging strength, were finally discontinued. Even the mildest stimulants, be they what they may, evidently increased the pain, hæmorrhage, and spasmodic action of the stomach, and thus indirectly excited the patient to an immoderate degree.

On the 30th the tongue began to look parched and dry; the pulse was soft, irregular, and rapid; and the breathing a little hurried. Patient complained of great weakness. The excitement and pain which vomiting caused was excessive; and although constantly inclined to vomit, he struggled manfully to repress the movement. Ice was given freely; the tannin increased by one-half a grain to the dose. Stimulating and nourishing enemata were administered, and the opium steadily continued.

During the night of the 30th patient vomited only twice, and on neither of these occasions were blood-streaks found in the ejecta. On the morning of Dec. 1st, patient was extremely prostrated. His language was almost inarticulate, and somewhat incoherent. No change in the appear-

ance of the tongue or beat of pulse. Between daylight and the hour of his death he vomited once, and a trace of blood was discovered. At 10 o'clock A.M. the pulse could hardly be felt; the eyes became fixed and glassy; the breathing irregular and laborious; and a mucous r le in the throat combined to announce approaching dissolution. Patient died at 11 o'clock A.M., Dec. 1st, 1863.

Autopsy was made four hours after death. The external appearances were not noteworthy. The stomach was dissected out, and opened along the line of the lesser curvature. This organ retained its normal position, form, and size before removal, and contained about five ounces of dark greenish grumous fluid, but nothing that resembled disintegrated aliment. The contents being turned out, and the inner surface washed, the whole pathological anatomy of the organ was revealed at a glance. From a point two inches distant from the pylorus, within and upon the posterior surface of the stomach, to a point an inch distant from the pylorus and entirely around the inner surface of the duodenum, irregular and confluent patches of the inflamed muscular tissue of the organ were observed almost entirely denuded of its mucous and cellular coatings. The eroded surface exhibited a bright pinkish hue, while beyond, upon the more healthy surfaces, the complexion was of a pale yellow, or ashy grey. Little threads of purulent matter and little points of coagulated blood were to be seen upon the ulcerated surface. The mucous membrane was very much thickened—the rug  not so well marked as they should be—and the blood-vessels were greatly distended. With the exception of the tissues so completely eroded, no specially interesting pathological appearances were observed; and looking, as we were, for a verification of our diagnosis, the examination was not extended.

I am persuaded that this lesion is of more frequent occurrence than is commonly supposed. The character of the ulcerations being the same as that found in camp diarrh ea, in the intestines, may not this lesion be a cause of the disease rather than a sequence? Post-mortem examinations always reveal this lesion in diarrh ea and camp dysentery, and the local lesion bears no constant relation to the severity of these symptoms.

CASE OF

GUNSHOT WOUND OF ELBOW-JOINT.

By J. FARNSWORTH, M.D.,

OF LYONS, IOWA.

JOHN MYERS, a young man of 18, of good constitution, was wounded in the battle of Antietam, Sept. 17, 1862. In raising his left arm, to hold his musket to his shoulder, a bullet passed in at the superior portion of the olecranon process, passing through the elbow-joint, and making its exit at the lower condyle of the humerus. He says that it bled profusely, as he fell back to the rear. He met a surgeon who applied a compress to each opening, and put around it a tight bandage, and directed him to the hospital. The next afternoon the bandage was removed, and a lint and water-dressing applied. He was then placed in the cars with the other wounded and transferred to Harrisburg. At Harrisburg the arm became very painful, and a fever setting in, the surgeons agreed to postpone amputation, which they had already decided on. The fever subsided, and he overheard one surgeon say that the arm might be saved, and therefore he resisted any attempt at amputation. The arm was then kept in poultice, and not much attention given to it. After remaining in the hospital nearly two months he was given his discharge. He travelled to Chicago, where he had it dressed, and then came here (a hundred and thirty miles further), and called on me for a new dressing, Nov. 17th, just two months from the battle. The elbow-joint seemed a mass of corruption. I passed a gum catheter through the joint, in the track of the ball, and removed a large fragment of bone from the internal condyle. He told me that many fragments had been from time to time taken out. A large abscess had formed at the

upper end of the ulna, which had been opened. I placed the arm, as I found it, on a splint reaching from the hand to the elbow, washed the openings, and syringed them out with soap and water; bandaged the hand and forearm, and took him twelve miles into the country to his father. I directed him to dress it in the same manner, with the addition of putting a poultice on the joint, until he was tired of it, and then to come in and I would amputate it for him. In four weeks he came to town to be examined for a pension. The examining-surgeon gave him a certificate of total disability, and urged him to have the unsightly sore removed.

From that time I heard no more from him, until yesterday he walked into my office to show his arm. It was entirely well; the elbow-joint was of course completely ankylosed, and bent at a right angle, but he had a useful, strong hand, and a serviceable arm. He told me it had been well for three months, and, though a little tender, was strong enough to allow him to do any kind of labor. Being his left arm he was hardly incapacitated from military duty. He was on his way to a recruiting station, to *re-enlist*. He resented the idea of joining the invalid-corps, as he was anxious to pay for the old score.

When he first came here, two months after the battle, there seemed no chance of any benefit even from resection; nor was there a month after, when examined for a pension. It seems to me now that an operation might be performed for an artificial joint, but he is too anxious to have another brush with the rebels, and prefers to wait for such an operation until the war is over.

I think this a good case of conservative surgery, in which a useful limb has been saved, with very little assistance from art.

LYONS, IOWA, Nov. 18, 1868.

A LABOR, WITH

PROLAPSE OF THE FUNIS AND TRANSVERSE PRESENTATION,

TREATED BY POSTURE AND MANIPULATION.

By JOSEPH MARTIN, M.D.,

OF NEW YORK.

On December 18, 1863, I was called in great haste to attend Mrs. M., in labor with her second child. While she was standing on the floor the membranes were ruptured during a pain, and the liquor amnii was suddenly discharged. On examination per vaginam I found a loop of the umbilical cord protruding from the os uteri, which was high up, and only sufficiently open to receive the point of the middle finger. By some effort the finger was carried through the thick and unyielding os, until the sharp edge of the right tibia of the f etus was distinctly felt. On making an external examination I ascertained that the head was resting upon the left iliac fossa, with the face turned downwards, the occiput being easily distinguished through the parietes of the abdomen.

As the umbilical pulse was natural, and the tendency to a breech presentation decided, I considered the chances of saving the child about the same that they would be in ordinary cases of the kind, and accordingly pressed the head up to the fundus of the uterus with one hand, and held the buttocks at the pelvic opening with the other, until the labor pains had fairly engaged the breech. But upon then examining per vaginam I found that the pulsations of the funis were frequent and very feeble during each pain, that the buttocks presented, and that the os uteri was thin, and dilated to the size of a dollar. The amount of the cord expelled from the uterus was very much increased, and that portion of it which depended from the umbilicus of the child passed down between the thighs; but the part connected with the placenta, which was attached to the fundus of the uterus, was on the outside of the right femur, near the hip, so that at each recurring pain it was pressed against the brim of the pelvis at the left acetabulum. The cause of the feebleness of the pulsations in the cord then

became evident. And it was equally evident that the child could not be born alive while in that position, if the labor was permitted to advance, and that no amount of dexterity in the employment of the usual artificial means could prevent the fatal effects of pressure upon the cord.

My first effort to effect a safe delivery was an endeavor to pass the outer portion of the cord over the right knee, when, I had reason to believe, there would be no dangerous pressure upon the cord until the head reached the superior strait. Failing in this expedient, I determined to try the effects of posture and external manipulation. Having placed the patient upon her knees, with her left side near the edge of the bed, and her face upon the pillow, I passed the left hand to the fundus of the uterus, in the absence of pain, and brought the head of the child back to the left iliac fossa, while, with the right fingers, the prolapsed funis was kneaded into the os uteri. As the head left the fundus the breech receded from the os, and the cord glided into the uterus. I found no difficulty in placing the head at the pelvic opening, with the occiput in relation with the left acetabulum.

Then, by encouraging my patient to remain in that position for some minutes, and by pressing the uterus and its contents upwards with the left hand under the fundus, particularly during labor pains, I directed the head of the child into the pelvis, until it became so much engaged as to prevent a return of the cord, when she was turned upon her back. And at twelve o'clock, three hours after I first saw her, the child was born, with a vertex presentation in the left occipito-anterior position, as if there had been no complication nor malposition.

The principal point of interest in this case is, that it illustrates the importance of gravitation in the treatment of labors with prolapse of the umbilical cord. By no other operation could the child have been saved. It may also be remarked, if experience in the management of a single case will justify the forming of an opinion, that the posture in which the patient was placed will facilitate external manipulation whenever it is desirable to change the position of the fœtus, or to convert a presentation which may cause delay and danger into one that is more favorable to mother and child.

Here, too, I will suggest that labors occur with other malpositions of the child, in which the practice adopted in the case related above may prove equally successful. Of these, the most important, because the most fatal to mothers and infants, is the arm presentation. The only treatment of such labors, when the child is alive, recommended by writers on obstetrics, and adopted by the profession, is turning. This operation is very simple when the membranes are intact, because, as Tyler Smith says, "the fœtus is moved as easily as a boat in water." "But," he adds, "when the patient has been in labor, the liquor amnii discharged for twenty-four or forty hours, the shoulder jammed into the pelvis, and held as in a vice, turning is one of the most, if not the most difficult operations in midwifery."

Dr. Lee relates 59 cases of this description of labor, and out of that number, records the deaths of eleven mothers, and 32 infants.

I will now endeavor to show the probable results of "Postural Treatment" in such a labor, with an antero-dorsal arm presentation, the head being at the left iliac fossa, as we find it illustrated in the wood-cuts of the text-books. After the patient has been placed upon her knees, with her face upon her pillow, and her left side brought to the edge of the bed, the operator would find but little difficulty, during the absence of pains, in moving with the left hand the head of the child towards the fundus of the uterus, while with the right hand he would gently press the protruded arm into the body of the uterus. And then, by the proper external manipulation, the head would be placed in the occipito-anterior position, with the vertex presenting, as was done in the above case.

I will venture further to suggest, as it is admitted by all

practitioners of midwifery, that one of every three infants is lost in pelvic, knee, and footling cases; that where circumstances do not demand immediate delivery, a great saving of life might result from this conversion into vertex presentations by external manipulation.

Reports of Hospitals.

KINGS COUNTY HOSPITAL, NEW YORK.

SYPHILITIC

NECROSIS OF BODIES OF CERVICAL VERTEBRA.

FATAL RESULT.—AUTOPSY.

By CHAS. R. SANDERSON, M.D.,

ASST.-PHYSICIAN.

F. S., age twenty-eight, had a sloughing chancre on glans penis eighteen months ago, in consequence of which one third sloughed away. Entered Bellevue Hospital March, 1863, and left July following improved. Soon after leaving Bellevue felt a stiffness in his neck, which gradually grew worse. Admitted to Kings Co. Hospital August, and left September 10 improved. Took cold, and returned. Sept. 17.—Coughed up anterior arch of atlas two-thirds of an inch in length. Oct. 8.—And occasionally other small pieces of necrosed bone afterwards commenced, being paralysed in both arms, Oct. 1. Progress of case, Nov. 10.—Paralysis increasing, considerable swelling of the neck in the region of the cervical vertebra, great soreness of throat, and constant hawking; neck stiff; face turned somewhat towards the left chin; unnaturally prominent; severe pain in region of neck; pulse 60; is taking iod. of potassium and wine. In consultation with the resident physician, Dr. Turner, a blister to the back of his neck was ordered. Sol. of morph., and throat sponged with arg. nit. 3 ss., aquæ 3j. Nov. 15.—Pain in neck removed by blister and morph.; moves arms better; grows weaker; ordered tart. of iron and potassa with comp. tr. gentian; pulse 80. Nov. 20.—Has better use of his arms; still grows weaker, and more emaciated; dysphagia increasing; some rigidity of muscles of back; bowels constipated; pulse 90; ordered milk punch, and bowels opened by enema. Nov. 25.—Dysphagia increasing from swelling and soreness of throat; emaciation and debility increasing; passes urine with difficulty; has still better use of arms; pulse 94. Nov. 27.—During forenoon he perspired profusely, and died at half past eleven A.M., whilst conversing with another patient.

Sec'tio Cadaveris twenty-two hours after Death.—Considerable emaciation; a greater prominence than natural posteriorly over third and fourth cervical vertebrae; incision made from occiput to third dorsal vertebra, and all of cervical vertebra removed; anterior arch of atlas wanting transverse processes; sup. art. surfaces and posterior arch healthy; odontoid process and body of axis necrosed; bodies of third and fourth cervical vertebrae sloughed away, and body of fifth somewhat necrosed; an ulcer the size of a quarter dollar communicating between diseased vertebra and pharynx; spinal cord to all appearances healthy.

Remarks.—This case is interesting, 1st. From the fact that with the above amount of disease he should walk to the closet daily until a few days before his death; 2d. That the upper extremities should be paralysed, and not the lower also; 3d. That he should improve in reference to his paralysis from Oct. 10 up to the time of death, whilst failing so rapidly in other respects.

They have a "Cripples' Union" in Brooklyn, N.Y., which consists only of persons who have lost a limb or its permanent use in the service of the United States. Its object is benevolence.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, Oct. 14, 1863.

DR. D. S. CONANT, PRESIDENT, IN THE CHAIR.

OVARIAN TUMOR, WITH TWISTING OF THE PEDICLE.

DR. FINNELL presented a mass of ovarian disease removed from a married woman twenty-two years of age. She dated her illness back three years, at which time (she was then unmarried) her menses became suppressed from sudden exposure to cold. For some days after she suffered from severe pain in the abdomen. Her menses did not appear for several months, when her abdomen began to enlarge to such an extent that many thought her pregnant. Four different physicians gave it as their opinion also that pregnancy existed. On the 4th of June, 1861, Dr. Nœggerath satisfied himself by an examination that the enlargement of the abdomen was only due to the accumulation of fluid, and proposed the operation of paracentesis abdominis as a remedial measure. The operation was performed, and a large quantity of serum was drawn off. Her general health then very much improved, and the enlargement did not show any tendency to recur. About a year ago she married. Some time subsequent to her marriage Dr. Finnell saw her and found that an abdominal tumor existed, which he was of the opinion was ovarian in character. About two weeks since Dr. F. was requested to see her, with a view of relieving her of the accumulated fluid in her abdomen. A trocar was passed in at one side, and about three quarts of bloody fluid were evacuated. She experienced such great relief from this operation that a few days after she requested that it be repeated. Dr. Finnell accordingly introduced a trocar on the other side and drew off five quarts of fluid. She was also tapped a third time through the first opening, and in that instance the quantity drawn off was four quarts.

Notwithstanding the immediate relief experienced after such operation, she was gradually worn out, and died on the 13th instant.

The autopsy took place on the 14th. The pedicle was found to be very narrow, and attached to the right Fallopian tube. On the opposite side, of the tumor from the pedicle there was attached to its surface a small slip of omentum; this process, together with the pedicle itself, was twisted several times in a given direction, leading to the inference that the tumor, while on the cavity of the abdomen, had revolved upon itself. There were numerous adhesions throughout the whole anterior and superior surfaces of the mass, but this was evidently a very recent affair. On section the tumor presented a dark, bloody, honey-combed gelatinous appearance, which was more like cancerous than ovarian disease.

DR. PEASLEE thought that inasmuch as five quarts were drawn off from the first tapping, the fluid came from the abdomen; and Dr. CONANT thought that the turning of the tumor, in the manner described, could be best accounted for on such a supposition.

DR. CLARK remarked that the twisting of the broad ligament by one circuit was not an uncommon occurrence in these tumors, and that the half-turning was very common. These phenomena he explained by intestinal adhesions.

DR. MARKOE stated that there were cases on record where the pedicle of the tumor was twisted sufficiently to cause the tumor itself to become gangrenous; and he recollected having seen such a case in the practice of Dr. Cockroft. In that case peritonitis was induced by the said mortification of the diseased mass.

REMOVAL OF OVARIAN TUMOR, COMPLICATED WITH EPIPLOCELE, ADHESION, HÆMORRHAGE, ETC.; OPERATION LASTING FIVE HOURS; THE CAVITY OF THE PERITONEUM WASHED OUT FOR A PERIOD OF SIX WEEKS; PERFECT RECOVERY.

DR. PEASLEE also presented an ovarian tumor, which he

had removed by ovariectomy six weeks before from a woman 39 years of age. The specimen was only interesting in connexion with the difficulties which had attended the operation. The operation lasted for a period of full five hours, but the greater part of the time was spent in exploration. Dr. Peaslee undertook the operation with very little expectation of completing it, at the solicitation of the patient, she having understood the unfavorable prospect of the case. He assured the patient that the probability would be that he could merely succeed in evacuating the contents of the sac. After, however, meeting with all possible complications he determined to remove the mass. The sac weighed thirty-six pounds, and was adherent everywhere on its anterior surface to the omentum. The patient had suffered from an epiplocele for the last six or eight years. The omentum was adherent to the umbilicus. As the tumor was developed the omentum had to slip up behind the tumor, consequently that portion of the organ engaged in the hernia became elongated and very vascular. It was half an inch in thickness, and looked very much like a muscle. The original incision into the abdominal walls had to be subsequently enlarged, so as to make it at least eighteen inches in extent. In the thickened portion of the omentum fifteen vessels were tied. In this way a great deal of time was necessarily taken up. The hæmorrhage, however, still continued from various points in the omentum, and Dr. Peaslee was forced to spread that organ on a warm wet towel, and consume an hour and a half longer in the endeavor to secure the remaining open vessels. After tying all the vessels that could be reached he lastly applied cold, with the desired result. She was kept under the influence of ether during the whole time of the operation, and after its completion required but fifteen minutes to be restored to consciousness. She suffered from no collapse or unpleasant symptoms for about six days, when symptoms of the absorption of decomposed blood began to manifest themselves. The wound was then opened in part, and two quarts of warm water injected into the cavity. This operation was repeated three times the next day, and as often for three weeks following. If the interval between the injections was during that whole time greater than two hours, severe constitutional symptoms would be developed, and a bright band would show itself in the centre of the tongue. No blood appeared in the washing after the first injection. At the time of reporting the case, six weeks after the injection, the patient was doing well, the injection being performed but once a day. At first the washings were very fetid, but this condition was corrected by the subsequent introduction of a solution of chloride of soda, in the proportion of a drachm to two ounces of water, and allowing it to remain in the abdominal cavity.

DR. PEASLEE remarked that the case was the most unpromising, one with which he ever had to do, but its progress since the operation had been most gratifying. In the case which he reported a year ago to the Society, where he was compelled to wash out the peritoneum, he had performed the injection over one hundred times for fifty-eight consecutive days. That patient, when last seen, had increased in weight from 100 to 140 lbs., and was in the enjoyment of perfect health. He stated, in conclusion, that he had never left the pedicle outside of the wound, but was in the habit of tying it with a double ligature, and returning it within the abdominal walls. On removing the tumor Dr. P. found the disease commencing in the other ovary, and removed that also.

OVARIOTOMY: REMARKABLE RECOVERY.

DR. CONANT related the following case of ovariectomy:—The patient first noticed an intumescence of the abdomen in September, 1861, since which time, according to her account, she had been a great sufferer. The tumor gradually increased until the 28th April, 1862, when she was tapped, 20 lbs. of fluid being drawn off; three weeks subsequently twenty-five more were taken. Dr. C. first saw

her while in Burlington, Vt. She was then enormously swollen; fluctuation in the abdomen was very distinct, and there existed a large umbilical hernia 4 inches in diameter, which was raised 2 inches from the free surface of the surrounding parts. There was also a very marked swelling and distinct fluctuation in the situation of the right labia majora. She returned to her home in Westport subsequent to this, and had 20 lbs. of fluid drawn off. Dr. Conant thought that the case was a favorable one for an operation, and with her consent proposed to perform it. The operation was performed June 11, at Westport. An incision was made from the umbilicus to the pubes; about three pints of fluid were evacuated from the peritoneal cavity. A trocar was then plunged into the tumor, and about a pailful of fluid in all was drawn from the different sacs. There were points of attachment for the tumor all over its upper portion, and they were not very extensive. It was found that a fold of peritoneum had been pushed down into the labium through the abdominal ring, forming a pouch for a quantity of fluid. The peritoneum was exceedingly vascular, and presented a varicose appearance. In order to discover the points of attachment of the tumor superiorly, it was necessary to enlarge the incision to 16 or 17 inches in length. These attachments proved to be large portions of the omentum which ran into the tumor; eight or ten ligatures were passed around these, and their connexions severed. In the course of the examination the liver, stomach, spleen, and intestines were all seen. After cleaning out the cavity of the peritoneum the pedicle was secured by three silk ligatures, and left hanging out of the wound, which in its turn was closed by sixteen silver sutures. The operation was about two hours in duration. The patient made a rapid recovery. In five weeks from the time of the operation when Dr. Conant called to see her again, she had taken her team, and had ridden five miles among the mountains to pick blackberries; the ligatures not having yet come away. The tumor weighed about forty pounds.

Dr. Conant expected trouble with the peritoneum on account of its varicose condition, but Dr. Peaslee thought that the immunity from inflammation was due to the thorough cleansings which the parts had received previous to the sewing up of the wound.

(To be Continued.)

American Medical Times.

SATURDAY, JANUARY 23, 1864.

LITERATURE IN MEDICINE.

"It is a noticeable fact that the greatest physicians have always been the best writers among physicians."—ZIMMERMANN.

THERE is an anecdote current that a New York physician, recently travelling abroad, met a distinguished Parisian surgeon, to whom he spoke in somewhat laudatory terms of his preceptor, a well known American surgeon. "What has he done?" was the prompt inquiry of the foreigner, adding, "I don't remember to have read any of his writings." "It is true, he has never written anything," replied the puzzled American, "but then he has a very large business." "And is that the standard by which you estimate professional excellence?" retorted the surgeon, with look and gesture expressive of contempt.

There is in this incident a world of meaning. It sets forth vividly a national trait in our profession, which disgraces us individually and as a body. We are proud of being called practical, having no time to write, on account of the severe pressure of our business engagements. The

young man, who, after being located half-a-dozen years in practice, still goes on foot, is set down as a failure. There is no hope of his ever rising to a level with the aristocracy of his profession. It matters little what may be his scientific attainments or his moral worth; he is an object of pity, if not of contempt. Men in high and influential positions frequently boast of their incomes, and exhibit their list of daily calls, or their bank-books, as an evidence of success. Half of the gossip in professional circles relates to the income of individuals.

These false ideas of professional success have taken deep root among us, and are bearing bitter fruits. The recent graduate is driven to seek business as the first great desideratum. He abandons the pursuit of special studies, for which he may have a predilection, because they will not immediately "pay." He cannot afford to labor patiently in the pursuit of knowledge, and let business come as its sweet reward. Like Ortugal, he demands that "the golden stream be quick and violent." If patients do not immediately seek him, he goes out into the highways and byways and compels them to come in. At all hazards he must have the appearance of business. Urged on by this infatuation, he assumes all the externals of success. His mode of living, and his equipage, are often far beyond his income, but he lives in the hope that these glittering baubles will advance his business, and in the end reimburse his outlay. He may attain the summit of his ambition, and acquire the largest practice in the community; but it is not improbable that he will sadly fail. But, whether he succeeds or not, he is lost to the science of his profession. He may seek positions in hospitals, schools, and societies, as collateral aids to success, but in every position he is a nonentity. His name may be trumpeted throughout the world, but no man of education will even recognise it. He dies, and leaves behind him no memorial but the perishable marble. A short generation passes from the stage, and his memory is swept for ever from the earth.

It is time the profession of this country set up a higher standard of merit than that now so generally adopted. We should pay homage only to genuine worth. The palm of excellence should be given to him who has the profoundest practical knowledge of the science and art of medicine, and who makes that knowledge available to others.

As a profession we should not only cultivate science, but we should also cultivate literary taste. History and observation prove the truth of ZIMMERMANN's remark—that the greatest medical writers of any age were the best physicians. We have no right to ridicule the man who frequently communicates his views to the profession. While it is true that too many write who have nothing worthy of publication, it is sadly true that many who fill high places withhold altogether their experience from their brethren. There are in this and other communities too many of this latter class. They are intellectually and morally worthy of the confidence of the profession, and capable of being the leaders in the department of practice to which they are especially devoted. By virtue of true merits they have obtained responsible positions in our hospitals, schools, and associations, and are qualified by long experience and sound judgment to instruct. It is to them that the profession look for sound instruction in practical medicine, surgery, and obstetrics, and for a just estimate of the value of the more recent improvements. But they are sealed books that give no information. They are

quick to turn every advantage which official position may have given them to their personal and pecuniary account, but they make no return to those who have raised them to power. They will have their reward in that utter oblivion which is hereafter to cover their names.

MEDICAL SOCIETY OF THE STATE OF NEW YORK.

THE first Tuesday in February, the 2d prox., is rapidly approaching, which is the period fixed by statute for the annual meeting of this time-honored institution. For several years past the meetings have been well attended, and the papers that have been presented have elicited a cordial interest. With the development of the literary and scientific institutions of our State the Society has kept pace. It has grown with the growth of our institutions of philanthropy and charity, with whose interests it is nearly allied. It has grown from a handful of medical men to a number larger than our State Legislature. Its reputation is no longer confined to the State capital, but is known and honored throughout the land, and on the other side of the ocean. It has become an index to the strength, learning, ability, and high standing of the medical profession of the State. To be a permanent member of it is reckoned a high honor. The distinguished position which the Society has gained can only be sustained by an earnest co-operation of all its members. It is incumbent on them to attend the meetings, and to come with papers suitably prepared to add to the character of the meetings. No member should excuse himself from a contribution on the ground that there will be a sufficient number without him. Every committee should be prepared with a report. No Delegate should allow trifles to prevent his being present. There is more necessity for exertion at a time when so many hundreds of the profession are absent—honorably absent in the service of our country. Let those attend who are not delegates, for they will be invited to participate in the deliberations of the Society. The reception of delegates by courtesy from sister State societies is becoming a pleasing feature in the meetings. Last year New Jersey and Connecticut were represented. There will be a much larger representation at the next meeting, and the influence that representatives bear away must be to increase our good name, and to give vital stimulus to their institutions. With the patronage of the State which we enjoy, we have no reasonable excuse if we fail of more distinguished attainments. Several papers of interest have been promised, among which is a surgical memoir by Surgeon JOHN A. LIDELL, now in charge of the Stanton Hospital, Washington, D.C.; one from Prof. J. V. P. QUACKENBUSH, of Albany, on some subject connected with his specialty in the department of obstetrics; while DR. WILBUR, the Superintendent of the Asylum for the Instruction of Idiots, or his teacher, DR. ED. SEQUIN, who was the first to systematize the instruction of idiots in France, and who has for two years past been practising medicine in this State, will read a paper on the Management and Instruction of Idiotic Children. DR. CHARLES FAYETTE TAYLOR has a paper with the homely but practical title, "Causes of Back Ache among American Women." It is proper to remark that authors should carefully inspect their own papers, and see that they are written in a clear, open hand, with proper and technical names in every case distinct; the copy should be on one side of the sheet only.

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

THE Secretary of this Society believes that we have done injustice to a useful charity by expressing the opinion that the annual allowance to these beneficiaries is not sufficient. This statement is founded on the present necessities of the beneficiaries, and the ability of the Society. The depreciation of the currency and the high rates of living require a much larger advance, and the income of the Society now warrants a more liberal allowance. The Society has an investment of nearly \$50,000, yielding a permanent income of upwards of \$3,000 annually. Its policy is to give as little as possible from the income, and add to the principal. Aside from the illiberality of such a course, it impairs the prosperity of the Society. We do not merely express our own opinion in this matter, but it is shared by many contributors, and by several of the Directors, to whose opinion the Secretary attaches so much importance. If, however, we are to be governed by the opinions of those who have had experience in the management of similar organizations, let us refer to the two London Societies. The Society for the Relief of Widows and Orphans of Medical Men (London) expends about two-thirds of its annual income. The Medical Benevolent Fund expends nearly if not quite its entire income. The Secretary writes as follows:

"My attention has just been called to an article in your Journal of the 2d inst., referring to the New York Society for the Relief of Widows and Orphans of Medical Men. This article being calculated to injure a most valuable charity, requires correction, both as to its facts and opinions. 1. The Society received no bequest from the late Dr. Cammann. It did receive \$10,000 (less the legacy duty) from Dr. Harsen's estate. 2. Whether or no the allowance granted to beneficiaries is a 'meagre pittance' or not, is of course a matter of opinion, as is also the remark made in such an authoritative, *ex cathedra* style, in the next sentence, viz. that 'the Society ought to give more liberally to those entitled to its funds.' That the opinion of the writer of the paragraph is not that of the Board of Managers, is evinced by a nearly unanimous vote at a recent meeting. This Board, composed of some of the most judicious men in the profession (as the Editor of the TIMES must be aware), acting in the light of the experience of similar organizations, decided adversely to a proposition to increase the allowance beyond the present advanced rate, which, it may be stated, is fifty per cent. more in the case of widows, and one hundred per cent. more in the case of children than in former years. No doubt the amount will be further increased as soon as circumstances will warrant it. It should always be remembered that the Society does not undertake to *support*, but only, as its name implies, to *relieve* those who call upon it for aid."

TREATMENT OF GUNSHOT WOUNDS OF THE CHEST.

THE great interest attached to the treatment of gunshot wounds of the chest has induced us to lay before our army surgeons at the earliest moment the very candid criticism of DR. HOWARD's method by PROF. LONGMORE, of the British Army Medical School, published in the London *Lancet*. The method of DR. HOWARD has not as yet been very frequently practised, but in the instances related by DR. H. it proved very successful. The limitation of the practice to the class of cases selected by PROF. H. would render it nearly inoperative in the present war. Wounds of the chest, as we meet with them, are for the most part of the kind to which he takes exception in its application. But its value can only be determined by practice.

Reviews.

OUTLINES OF THE CHIEF CAMP DISEASES OF THE UNITED STATES ARMIES, AS OBSERVED DURING THE PRESENT WAR. A Practical Contribution to Military Medicine. By JOSEPH JANVIER WOODWARD, M.D., Assistant-Surgeon U.S.A.; Member of the Academy of Natural Sciences of Philadelphia; of the Pathological Society of Philadelphia, etc. 8vo., pp. 361. Philadelphia: J. B. Lipincott & Co. 1863.

(Concluded from page 35.)

THOUGH our notice of these chapters is imperfect and hasty, we cannot forbear an allusion to the satisfactory and decidedly advanced views which the author's excellent skill in microscopy has enabled him to present, in reference to the histological phenomena of the special enteric lesions that are found in fatal cases of typho-malarial fever, and in chronic diarrhoea. Avoiding technicalities and details, we understand DR. WOODWARD to state, the anatomical lesion of "Peyer's patches," in patients dying of typho-malarial fever, to be essentially identical with the changes that occur in pure typhoid fever, but differing from the typhoid ulcer in this, that in typho-malarial diseases the tumefaction of the agminated patch has not been observed to rise so abruptly from a constricted base as sometimes seen in the typhoid mass. But our author regards the essential pathological elements and changes as being identical in the camp and the civic forms of the typhoid malady. Under his microscopes the *typhoid material* and ulcer are defined as follows: 1. An abnormal multiplication and massing of the connective tissue cells [connective tissue corpuscles of Virchow], commencing in and surrounding the agminated follicles, and thereby constituting the *plaque* or *typhoid mass*. This hasty cell multiplication is most prolific and rapidly abortive at and near the central point of inflammation, the cells being multinuclear, multifissile, and quickly degenerated at that point, and as the inflamed line of cells recedes from that point, or from the ulcerated surface, the process of cell development appears more and more normal. But the inflammatory process tends to dip deeply into the intra-muscular connective tissue, and as the process of inflammation goes on from the diseased patch, perforation of the intestine may occur.

In the fatal diarrhoea of the camp DR. WOODWARD finds an analogous histological process of morbid and degenerative cell-multiplication preceding and attending upon the ulcerations that take their *point d'appui* from the "follicles of Lieberkuhn," the connective tissue cells becoming rapidly multi-nucleated, go on "multiplying by division" until the intercellular spaces are encroached upon, and until follicles and normal tissues are all overwhelmed and broken down by a wasted and extravagant cell-life, or hyperplasia of normal tissues, that ends in ulceration.

Thus, it will be observed by the reader, the microscopy of DR. WOODWARD in a new field and for the most practical of purposes, adds fresh confirmation to the new doctrine promulgated by Virchow, but which doctrine, as respects the histology of *typhoid material*, that pioneer of science very hesitatingly opposed to the accepted teachings of Rokitsanski.* The practical importance of this advanced step in the pathological knowledge of typhoid material and the ulceration of Peyer's patches, will be seen when such knowledge is made distinctly tributary to a wisely directed and rational therapeia that shall rescue a larger percentage of lives from the typhoid malady. Although this view of the nature of intestinal ulceration is not yet widely known, we believe DR. WOODWARD's microscopical definitions of the actual changes the clearest that have been made; and they are entirely harmonious

with the observations of Bennett* and of Simon, the latter of whom says that the earlier forms of increased textural germination give rise to cell growths that rapidly undergo *degeneration*, and that later successions of the same germinal act furnish *pus-cells*, and that these abnormal processes are but "one common result of tumultuous textural over-growths."†

DR. WOODWARD's description of the morbid anatomy of the intestinal canal in camp diseases may, therefore, be regarded as strongly confirming Virchow's views of *hyperplasia*, while his observations, and the practical conclusions to be derived from them, are more definite than anything that has preceded them.

In the treatment of camp dysentery and diarrhoea the author has not given prominence to the popular and very effective preliminary employment of the alkaline cathartic that the veteran DR. TRIPLER so strongly recommends in his little treatise on army practice, and which has most deservedly won the repute it enjoys among military officers, and scarcely less in civil practice. In the management of pneumonia, also, our author manifestly hesitates to adopt the simple *rational* treatment which is rapidly finding able advocates, but which certainly must seem to be perilous practice until each medical observer witnesses for himself the results of such a non-medicating method. In the case of intestinal inflammation or ulceration, it is claimed that the intestinal canal, after having been effectually cleared, and all morbid secretions swept away by the magnesian cathartic, may most safely be left to the healing influence of absolute repose; and, in the latter case, that of pneumonia, it is with much reason believed, that when uncomplicated, the inflamed organ has best chances of speedy and certain recovery when all the conditions of greatest possible quietude, and the absence of all special sources of local irritation, are insured to the patient, and, as in the management of acute intestinal inflammation, permitting no unnecessary perturbation of the diseased part, or of the normal functions of the system.

We are glad to see DR. WOODWARD's strong expressions of disapprobation of the over-active and perturbing treatment of all these maladies, and wish he had gone further and dissuaded from the use of various therapeutical agents which he allows. But in writing not for eclat, but for the purpose of specific and much needed instruction in matters of detail, such questions in therapeutics are inevitably discussed by an author, and DR. WOODWARD is fortunate in not having plunged more deeply into the esoteric method of discussing such questions of daily practice.

We cannot lay aside this book without an allusion to the valuable chapter on *Measles in Camp*. Every medical officer should read it, not for any light needed upon questions of medical treatment, but for stronger convictions respecting the moral and professional obligations of the army surgeon to do all in his power to prevent or arrest the prevalence of measles in the camps. And if any physician is disposed to fold his hands in view of the unproved and very improbable fact, that an innocent *penicillium* fungus in straw beds has been reported as the originating cause of this pest of camps, our author's crucial experiments with the *straw-fungi*, his nice microscopy, and his keen logic, will dispel such illusions. The fact is, that experience and science plainly teach that measles and the other exanthemata should be regarded as preventable maladies, which, even under the influence of epidemic influence, ought never to become prevalent where there is proper sanitary administration and police authority.

Our author states that notwithstanding the great deficiencies in regimental medical reports during the first year of the war, he finds 21,676 cases and 551 deaths from measles were reported during that year; and he very truly remarks that, "the number of deaths represented by these figures far under-estimates the mortality proceeding from

* See Virchow's "Cellular Pathology," p. 440, Am. Edition; and Rokitsanski's "Pathological Anatomy," Art. *Typhous Process*, etc.

* Bennett's "Clinical Medicine," Am. ed., p. 874.

† See "Essay on Inflammation," by J. Simon, in Holmes's "System of Surgery," p. 81.

this cause. In fact, the disease was rather fatal in its sequelæ than in itself."

He makes the following statement concerning the prevalence of measles in the armies:

"Epidemic measles generally made its appearance at an early period in the history of each regiment, frequently in its first encampment, and swept through the ranks, attacking all who had not previously had the disease, and occasionally even these did not escape. Frequently from one-third to one-half of the effective strength was attacked, and the disorder continued its ravages until all who were susceptible had suffered. * * *

"Frequently fatal in itself, this epidemic was, however, especially to be dreaded on account of the disorders which followed in its train. Severe bronchitis, often of considerable duration; typhoid pneumonia, which frequently proved fatal; and a general exhaustion and prostration, in which ordinary incidental diseases assumed severe and adynamic characters, were among the most formidable sequelæ.

"No part of the army escaped. The new levies on the Pacific slope suffered as well as the great armies of the central basin and the Atlantic coast. The disease, however, was most formidable, and produced the greatest mortality in the valley of the Mississippi and its tributaries.

"In this region, and especially in Missouri, and in the army of the Ohio, measles very frequently assumed a typhoid character, and petechial spots made their appearance, constituting what was generally designated as black measles, a condition which was comparatively rare on the Atlantic coast."

The chapter on pseudo-rheumatic affections is deserving the special attention of military surgeons. During the first year of the war there were some 44,000 cases of rheumatism reported; and inasmuch as pseudo-rheumatism is one of the indices of the scorbutic taint, it demands something more than the trivial notice of an entry upon the sick-register, by a misnomer, and the neglect to which the sufferer too often is doomed. As in a large proportion of the more than 200,000 cases of diarrhoeal affections in the camps every year, so in the cases of pseudo-rheumatism, the scorbutic taint is the most important and most obstinate pathological element.

DR. WOODWARD closes his treatise with an explanatory appendix, designed to interest and aid the young medical officer in the statistical records prescribed by the regulations of the Medical Department. In every chapter, and upon every page, we discover the same commendable and unambitious design of *utility* and helpfulness, and for this the medical profession and the friends of humanity will justly feel gratefully indebted to the talented author, who, like the distinguished Chief of the Medical Bureau, SURGEON-GENERAL HAMMOND, has not hesitated, during the incessant pressure of official duty in bureau service, to devote hours which would otherwise have been passed in rest, to the noble and much needed work of preparing special treatises upon the most important subjects that relate to life-saving in our armies. Like DR. HAMMOND's excellent volume upon *Army Hygiene*, this treatise of SURGEON WOODWARD should be found in the hands of every medical man in civil as well as military life.

Army Medical Intelligence.

ORDERS, CHANGES, &c.

The resignation of William H. H. Mussey, Medical Inspector U.S.A., has been accepted by the President, to date January 1, 1864.

So much of Special Orders No. 575, paragraph 22, series of 1863, from the War Department, as discharged Surgeon B. J. Bettelheim, 106th Illinois Vols., is revoked, and Surgeon Bettelheim is discharged the service of the United States by resignation, as of the date of the aforesaid discharge.

Surgeon Michael D. Benedict, 75th New York Vols. (published officially December 14, 1863), having failed to appear before the Military Commission, instituted by Special Orders No. 53, series of 1863, from the War Department, within the prescribed time, is by direction of the President dismissed the service of the United States, to date December 14, 1863.

Surgeon William H. Palmer, 9th Michigan Vols., has been dismissed the service of the United States by direction of the President, for conduct prejudicial to good order and military discipline.

Hospital Steward Peter Gabrielson is honorably discharged the service of the United States, to enable him to accept the appointment of Assistant-Surgeon in the 1st Minnesota Vols.

Assistant-Surgeon C. S. De Graw, U.S.A., is relieved from duty in the Campbell General Hospital, Washington, D. C., and will report in person without delay to the commanding General, Department of the Tennessee, for assignment to duty with the 1st Battalion, 13th U.S.I.

The U.S. General Hospital at Bedloe's Island, New York harbor, will be discontinued, the medical and hospital property turned over to the Medical Purveyor, New York, and the pavilion wards converted into barracks for convalescents, and men returned to duty, from General Hospitals in and near New York. The commanding officer at Fort Wood will receive, take charge of, and expedite the transportation to their regiments of all men sent to the Convalescent Barracks on Bedloe's Island, by the Medical Director of the Department of the East. Medicines and Medical attendance will be furnished by the Post-Surgeon.

Hospital Steward Daniel W. Jacobs, U.S.A., will report in person without delay to Surgeon R. H. Alexander, U.S.A., Medical Director at New Orleans, La.

The following assignment of medical officers is hereby made:—

Assistant-Surgeon William Carroll, U.S.V., now on duty at Cumberland Hospital, Nashville, Tenn., to report to the commanding General, Army of the Potomac, to relieve Assistant-Surgeon Horatio B. Buck, U.S.V. Assistant-Surgeon Buck, on being relieved, to report to the Medical Director, at Cincinnati, Ohio, for duty.

Assistant-Surgeon W. W. Wythes, U.S.V., now on duty at General Hospital, Nashville, Tenn., to report to the General commanding Department of the Ohio, to relieve Assistant-Surgeon Edwin Freeman, U.S.V. Assistant-Surgeon Freeman, on being relieved, to report to the Medical Director at Cincinnati, Ohio, for duty.

Assistant-Surgeon Charles F. Haynes, U.S.V., now on duty at Cumberland Hospital, Nashville, Tenn., to report to the General commanding the Army of the Potomac, to relieve Assistant-Surgeon Franklin Grube, U.S.V. Assistant-Surgeon Grube, on being relieved, to report to the Medical Director at Cincinnati, Ohio, for duty.

The resignation of Surgeon D. W. Hartsburn, U.S.V., has been accepted by the President, to take effect January 8, 1864.

Surgeon Matthew McEwen, 2d West Virginia Cavalry, dismissed by Special Orders No. 427, from this Office, is hereby restored to his command, with pay from the date on which he joins his regiment for duty, provided the vacancy has not been filled, evidence of which must be obtained from the Governor of West Virginia.

Medical News.

N. Y. PATHOLOGICAL SOCIETY.—At the last meeting of this Society, held Jan. 13, the annual election was held, resulting in the choice of the following officers for the ensuing year:—Dr. A. Jacobi, President; Drs. H. B. Sands and J. Lewis Smith, Vice-Presidents; Dr. Geo. F. Shrady, Secretary; Dr. W. B. Bibbins, Treasurer. Delegates to the American Medical Association:—Drs. Sayre, Noyes, Shrady, Eliot, Bibbins, Hamilton, Conant, Sairs, Krackowizer, and Voss.

MORTALITY OF PROVIDENCE, R. I.—DR. SNOW, City Registrar, reports that the number of deaths in Providence in 1863 was 1,215, an increase of nearly 33 per cent. over the number in 1862. The deaths in 1863 were more than in any year since 1854; but in proportion to the population the mortality was not large. We estimate the population of the city at the present time to be at least 55,000, which would give one death in 45.27 for the year 1863. In the whole list of causes of death only 8 show a decrease from the year 1862. From the class called zymotic diseases there were 358 deaths in 1863, or 29.4 per cent of the whole number from known causes. In 1862 there were 196 deaths, or 20.3 per cent.

ST. LOUIS MEDICAL JOURNAL FOR 1864.—We are glad to learn that this excellent journal is to be revived under the editorial supervision of Professors Linton and White. They state:—"The publication of the ST. LOUIS MEDICAL JOURNAL was suspended three years ago. To continue it during the throes of a gigantic revolution seemed a hopeless task. Its subscribers were scattered and dispersed with the rest of the population—some rushing to the fields of danger and battle, others to places of real or fancied safety, all absorbed by other thoughts than those inspired by the sciences and arts of peace. Danger, disgrace, and death—glory, renown, and success—these exciting themes occupied the thoughts of men. The great question of the day was not through what avenues, and by what means, intellectual pleasure, scientific advancement, and material amelioration should be sought, but 'to be or not to be,' this was the question.

"The ensuing volume will be issued in numbers each alternate month, commencing January, 1864, and will contain ninety-six pages."

Original Lectures.

CLINICAL LECTURES

DELIVERED AT THE BELLEVUE HOSPITAL,

By STEPHEN SMITH, M.D.,

PROF. OF PRINCIPLES OF SURGERY IN THE BELLEVUE HOSPITAL MED. COLLEGE.

CONTUSION OF THE SKULL BONES.*

(Concluded from page 28.)

ALTHOUGH injuries of the head not attended with fracture are among the most frequent accidents which we meet in practice, contusion of the bones of the skull is of comparatively infrequent occurrence. The great majority of injuries to the external parts of the head result in rapid recovery, or terminate in unimportant local affections. But contusion of the cranial bones is exceedingly liable at some not very remote day to prove fatal. In the case just narrated, a classical example of this latter form of injury, we have the various stages of the local changes induced well marked by symptoms and sequelæ. It will prove instructive, therefore, to review the principal features of this case, with a view to discriminate between contusion of bone and other injuries of the head not attended with fracture.

First, what is meant by contusion of the skull-bones, and what are the changes which follow? The nature of the injury is that of a bruise of the bone, affecting especially the external table and diploe. During the week following the receipt of the injury the patient remained quiet, and the external wound closed. But the injury to the bone was not so easily remedied. Inflammation of the diploe had been established, and was doubtless in progress at the time the patient was dismissed cured. This inflammation extended slowly to the external and internal covering of the bone, and both were at once implicated. Then was set up that train of symptoms which the patient exhibited on entering this hospital. He was suffering from inflammation of the dura mater and pericranium. Pus formed between these membranes and the bone, giving us externally the puffy purulent tumor, and internally a collection above the dura mater, and creating sufficient pressure on the brain to cause coma, and finally hemiplegia. The separation of the pericranium and dura mater led to the death of the bone as far as the nourishing coverings were detached, which in this case was of remarkable extent. The operation performed was designed to evacuate the pus accumulated between the dura mater and bone, and thus relieve one of the most dangerous symptoms. The points of interest, then, in the pathology of severe contusion of the skull bones are: That inflammation is established in the diploe, which, extending, involves the pericranium and dura mater; these membranes separating from the bone, necrosis follows to the extent to which these coverings are detached; pus also forms between the dura mater and bone, causing dangerous pressure upon the brain. It must be understood that the internal inflammation is not always so happily limited, as in this case, to the dura mater. Frequently it extends to the arachnoid and pia mater, leading to the formation of purulent collections beneath the dura mater, either in the cavity of the arachnoid, or still more deeply. This latter class of cases almost invariably prove fatal.

Let us now examine a little in detail the features of this case which are the most characteristic and instructive. We first notice the nature of the instrument with which the injury was inflicted. It is stated to have been the margin of a shovel, that is, an instrument with a dull edge. Now, this is an important fact. Blows dealt with such weapons are more apt to produce contusion of bone than when sharp instruments, like a heavy knife, or sword, or

very blunt instruments, like a club, are employed. Sharp-edged weapons may penetrate the bone, but they will incise its structure; while blows with a club will either bruise the scalp, or, if greater violence is used, fracture the skull, with or without serious injury to the brain and its coverings. This latter fact was remarkably illustrated during the riots last summer. A large number of persons were brought to the hospital suffering from injuries of the head, the result of blows with clubs. Frequently the injuries were inflicted by the policemen's clubs, which are round and smooth. In many cases the injuries were limited to the scalp, and ultimately did well. In others, however, the skull was fractured by these weapons, and oftentimes to a remarkable extent. In none of these cases was there a train of symptoms developed like that you have heard. But frequently a patient enters the wards with only a slight scalp wound, inflicted perchance with a butcher's cleaver (a favorite weapon), or the edge of a shovel, or some similar instrument, and though there are no local appearances or general symptoms to indicate future trouble, the case is one that should from the first excite grave apprehensions.

Again, let us note the immediate effect of the injury. The wound is described as a lacerated scalp wound, about two inches in length. Now, such a wound, in itself, is not suggestive of any more serious results than an ordinary lesion of the scalp. But taken in connexion with the nature of the instrument employed, and the stunning effect produced, we have good grounds to fear the development of more important symptoms. Under such circumstances we should proceed on the supposition that the violence has been expended directly upon the bone, and remotely upon the brain and its coverings. It is further stated, also, that this patient immediately entered a hospital, where he remained a week, when he was discharged cured. But was he cured? Certainly not. The wound, it is true, was healed; there was only tenderness at the seat of the injury; there were no local or general symptoms. And yet he left the hospital at the most critical period in the history of the case. An inflammation was impending in bruised structures, both hard and soft, which required only the stimulus of physical and mental excitement to be developed with fatal violence.

With a knowledge of the nature of the injury, and of the subsequent changes which it effected, what are the indications for treatment at this stage of the case? Long continued rest is undoubtedly the most important safeguard against subsequent evils in every severe contusion of the soft or hard parts. While incised wounds heal rapidly, with little tendency to inflammation, bruised tissues, from the partial disorganization produced by the injury, recover slowly, and with strong predisposition to suppurative inflammation. In every bruised tissue there is doubtless some local death produced; some total loss of molecular vitality suddenly superadded to the normal waste of the part. There is also a disturbance of the circulation; blood-vessels are more or less contused, lose their vitality, and become merely enlarged channels in which the blood circulates freely, or stagnates. Here are two conditions strongly predisposing to inflammation—an enfeebled vitality of tissue and a languid or interrupted circulation. Rest, mechanical and physiological, is imperatively required to relieve the injured part as far as possible of additional tissue-changes, and of the local determination of blood. It was equally important that the mind should be at rest, for the remote effects of the injury were expended upon the brain and its meninges at the point of contact. The patient should be placed upon an unstimulating diet, and rest enjoined for two or three weeks. The period of greatest liability to the supervention of inflammation is between the eighth and sixteenth days. I cannot impress upon your minds too strongly the importance of closely watching your patient at this time. It is the only occasion when you can be certain that your remedies will avail anything towards the successful issue of the case.

* Contusion, misprinted concussion in the preceding number.

When the patient entered this hospital, you will recollect that his symptoms were severe pain in the head, fever, intolerance of light and sound, and finally, after several days, delirium, alternating with stupor, and soon after well marked hemiplegia. Meantime there had arisen at the seat of the injury a puffy tumor, which gradually extended over the parietal and part of the frontal region. The severe pain clearly indicated that the inflammation developed in the bone had involved the dura mater and pericranium at the period of his admission. The subsequent symptoms show its progressive extension, the separation of both membranes from the parietal bone, and the formation of pus between them and the bone. That which accumulated externally formed, together with gases, the puffy tumor of the scalp, and that, collecting above the dura mater, caused the symptoms of cerebral compression. At the first symptom of inflammation the treatment should be severely antiphlogistic. Not only is rest now positively required, but constant derivation of saline cathartics should be early secured and long maintained. Venesection was formerly always recommended, and in many cases is a useful remedy. Comparison of well authenticated cases shows that in injuries of the head, involving inflammation of the meninges, much the largest percentage of cures followed repeated venesections. It is not a measure to be discarded, but should be employed judiciously where the patient is of a full habit. But in hospital practice we have in veratrum viride an arterial sedative which in general answers every purpose, without the permanent depression which follows venesection. In the use of this or any other drug in these cases, we should be careful to avoid inducing vomiting. If these symptoms yield, the period at which the patient is allowed to resume his business must depend upon circumstances; he should return to it cautiously and gradually, and it is unsafe for him to become actively employed, especially mentally, under many months. At the first symptom of cerebral disturbance he should again resume the treatment just presented. At the period at which I first saw the patient there was evidently a separation of the pericranium, and a formation of pus beneath it, over the entire parietal bone. Pott, who first described this disease, regarded this "puffy, circumscribed, indolent tumor of the scalp, and a spontaneous separation of the pericranium from the skull under such tumor," as good evidence of the accumulation of pus between the dura mater and skull. It was certain that an effusion had taken place upon or within the brain, giving rise to the symptoms of compression, but experience proves that it is not always located above the dura mater, when the puffy tumor exists. But with all the uncertainty of being able to reach the effusion and relieve the compression with the trephine, the surgeon has but one course left to pursue, and that is an operation. If the pus is above the dura mater, as in this case, great and permanent relief may follow. If immediately beneath the dura mater, indicated by the non-pulsation of this membrane, and its tendency to protrude at the opening, it is safe to evacuate the pus by incision. In the subsequent treatment of the case, no rules can be prescribed; symptoms should guide in the use of remedies. The case will probably terminate fatally when it has passed to the stage of formation of pus within the cranium.

The amount of bone separated in this case is very unusual, yet it has been exceeded. A case was reported in a Canadian medical journal several years ago in which a large portion of the top of the cranium separated without any serious ill effects following. A case is reported in which the entire skull-cap came bodily away two years after the receipt of a blow.

THE death of JOSEPH HENRY GREEN, President of the Medical Council, is announced in the English journals. He occupied a position in the profession only second to that of Brodie.

Original Communications.

REMARKS ON THE CONSERVATIVE TREATMENT OF GUNSHOT FRACTURES OF THE KNEE-JOINT.

By B. B. MILES, M.D.

ACTING ASST-SURGEON, U. S. A. JARVIS GEN'L HOSPITAL, BALTIMORE.

THESE injuries, always numerous in warfare, offer many subjects for the consideration of the military surgeon. No class of wounds includes so many cases that fall under his prolonged care. This war has established the fact that in all forms of gunshot fractures, and especially fractures of the long bones, the position of the wounded limb is of the greatest importance; and that extension and counter-extension are our true resources.

As a general rule, primary amputation should never follow ordinary fractures below the knee-joint from rifle-balls; and in gunshot fractures of the thigh in the upper third, the danger attending amputation is so great that the question is open for discussion, whether it is safe to endeavor to save the limb or to amputate. In our imperfect knowledge we are not always justifiable in operating, while all will agree that it is more important to save the limb than to amputate. During the Crimean war, particular attention was directed to this question, and it was generally conceded that the advanced experience in conservative surgery would lead to many such cases terminating favorably, with preservation of the limb, which would previously have been amputated. In the surgical history of the Crimean war we learn that 14 out of 174 cases of compound fractures of the femur among the men, and 5 cases out of 20 among the officers recovered, and those were selected cases for the experiment of preserving the limb intact. Amputations of the thigh were very fatal in their results, the recoveries among the men being in the upper third 43.3 per cent. of all treated. Among the officers it was more favorable. In considering the results of gunshot fractures of the femur, the situation of the injury is of vast importance in regard to the chances of recovery, either with or without amputation; as for amputation it has been abandoned, except when large blood-vessels and nerves are implicated. To this practice our surgeons have been guided by the accumulation of the records of the present war. In the Surgical History of the Crimean war this fact is shown in the results of amputations; but there is no record of those cases without amputation. Dr. Macleod was able to discover only three cases of compound fracture of the upper third of the femur that recovered without amputation.

The Femur is the most powerful and most compact in its structure of all the long bones of the body, and when fractured, the lesion is generally rendered compound by the direct contact of the missile with the bone; but the fracture is sometimes simple when caused by indirect projectiles, such as stones and spent balls. These injuries are liable to become further aggravated by the fracture extending into the joint; and again, joints may be opened by missiles without apparent lesions of any portion of the bone extending into their structure. In compound fractures the periosteum is generally torn from the bone, and the medullary membrane is either crushed, or involved in inflammation to a certain extent, and in a majority of cases necrosis is limited by the extent to which these membranes are torn away; and it is here that the subject of pyæmia should be mentioned, as met with in gunshot injuries of bones, and especially those of the long bones in which the canal is opened and splintered. The probable causes of this are, 1st. the prolonged suppurative stage; 2d. the irritation caused by the sharp edges increased by transportation; 3d. the thrombosis in the bone leading to the veins being

its local source: 4th, depressed vital powers (which are not uncommon to our soldiers); 5th, exposure to impure atmospheric air so frequently found by the congregation in our wards, of patients with suppurating wounds; and 6th, the depraved constitutional condition of our soldiers with a tendency to scurvy, predisposing to the absorption of pus by the veins. These are the principal agents favorable to its development and course. My observation has led me to believe that certain individuals are more predisposed to pyæmic poison than others in similar circumstances; for instance, in a gunshot wound of the femur in which there was no fracture or splintering, but only a small portion of the periosteum torn off, and the shaft contused by the ball, severe inflammation followed, the medullary canal became filled with pus, and the patient died from pyæmia. This case occurred in this hospital.

After a battle, when the arrangements will admit of it, the wounded should receive surgical attention previous to being transported to the regimental or general field hospitals. A slight dressing and judicious directions to the litter-bearers may be the means of saving many a soldier's life.

It now becomes the duty of the surgeon to explore the wounds, and of all instruments for conducting this examination the finger of the surgeon is most appropriate. 1st. The direction of the wound can be ascertained without any disturbance of the structures involved. 2d. If any bones are fractured, the length, position, shape, number, and looseness, may be ascertained. 3d. The finger will detect more readily the presence of foreign bodies. Particular attention should be paid to the exit of the ball. After the removal of all loose and detached portions of bone, all further examination should be regarded as meddlesome interference which may cost the patient his life.

There is much discussion prevailing respecting the uniting of fractures of the femur without shortening, and from the time of Hippocrates down to the present date the profession has been divided; one side declaring that shortening of the limb may be prevented, and the other positively denying it. Now, in the study of the arrangements of the muscles of the lower extremity we are convinced that the application of extension is of the greatest service when the limb is in a horizontal position, and in the anterior suspensory apparatus, or Buck's apparatus. When the former splint is properly applied with two stationary bandages at each extremity and an independent bandage with suitable cords, it is all that is absolutely necessary to complete the apparatus. The dangers attending wounded joints are influenced by a variety of circumstances. In young persons such wounds are attended with less severity than at a more advanced age, and a good constitution is more favorable for the conservative treatment than one broken down by prolonged debauchery. In the treatment of wounded joints it is of the highest importance to procure if possible immediate union, and to prevent or check the spread of inflammation. The size of the wound, and the degree of violence which has been inflicted on the joint, also demand our attention.

The limb must be carefully secured on a splint, and fixed in that position which will be most advantageous to the patient; and as perfect immobility is of the greatest importance, the splint must be so applied as to prevent any articular motion. There is no splint, in my opinion, so perfectly adapted to all the requirements of an injured joint as the anterior suspensory apparatus. The immediate and continued irrigation with cold water is of the greatest advantage in subduing inflammation. When matter has been formed, its free exit must be afforded by enlarging the original openings. Now all that remains to complete the cure is more experience, patience, and perseverance.

CASE I.—Compound Comminuted Fracture of the Thigh, caused by a Minié Ball.—Private Wm. W. Sands, aged 27 years, belonging to the 24th Regt. Michigan Vols., was wounded at the battle of Gettysburg, July 1st, 1863. The ball struck the outer side of the right thigh, passed in, fractured and comminuted the right femur, and passed

directly through the limb. The fracture of the femur was at the junction of the middle and lower thirds of the bone. The patient states that the amount of hæmorrhage was great, but that the shock to his constitution was slight; he at first only experienced a sharp, stinging pain in the right thigh. It was early in the day when he was wounded, and after the fire had slackened he was carried off the field to the General Hospital, and his thigh placed in the anterior suspensory apparatus. The suppuration is described as being copious, and yet laudable in color and consistency. The wounds caused by the entrance and exit of the ball healed kindly, and rendered no further annoyance. At the end of two months from the time of receiving the injury, the splints were removed, and it was found that the fragments had united firmly, and he was accordingly allowed to move about on crutches. He was transferred to this hospital November 11th, 1863. By actual measurement of the limb, and comparing it with its fellow, it is ascertained that the shortening amounts to three-quarters of an inch, with almost perfect use of the hip, knee, and ankle-joints. Since his admission to this hospital the general condition of the patient has improved rapidly, and he is now moving about freely. Many small pieces of bone were removed as they became detached, and his case bids fair to be most happy in its result.

CASE II.—Compound Comminuted Fracture of the Thigh by a Minié Ball.—Private Richard E. Artlur, aged 23 years, belonging to the 3d Regiment Michigan Vols., was wounded at the battle of Gettysburg July 1st, 1863. The ball struck the outer side of the right thigh, passing in, fractured and comminuted the right femur, and passed on and lodged under the sartorius muscle, over the femoral artery. The fracture of the femur was at the junction of the middle and upper thirds. The patient states that the amount of hæmorrhage was small, and that the shock to his constitution was slight; he at first experienced only a sharp, stinging pain in the thigh. It was late in the day when he was wounded, and consequently it was night before he was carried to the General Hospital. He was transferred to this hospital July 10th, and an examination with the finger found no loose fragments, and the limb was placed in the anterior suspensory apparatus. The suppuration was copious, yet laudable in color and consistency. The ball was removed August 4th, and the wounds caused by the entrance of the ball and the knife healed kindly, and rendered no further annoyance. At the end of six weeks from the time of receiving the injury, the splint was removed, and it was found that the fragments had united firmly, and he was accordingly allowed to move about on crutches. By actual measurement of the limb, and comparing it with its fellow, it is ascertained that the shortening amounts to one inch, with useful joints; in fact, I think they are equally as good as those of the opposite limb. His general condition has improved rapidly, many small pieces of bone have been removed, and his case promises to be most happy in its results.

CASE III.—Compound Comminuted Fracture of the Thigh, caused by a Minié Ball.—Private R. Pettit, aged 18 years, belonging to the 82d Regt. New York Vols., was wounded at the battle of Gettysburg, July 1st, 1863. The ball struck the outer side of the left thigh, passing on, fractured and comminuted the left femur, and passed directly through the limb. The fracture of the femur was at the junction of the lower and middle thirds. The patient states that the hæmorrhage was slight, and that the shock to his constitution was very severe; he at first experienced a sharp, stinging pain in the left thigh. It was early in the evening when he was wounded, and he was not carried off the field until dark, when he was placed in the General Hospital. The thigh was placed in the anterior suspensory apparatus. The suppuration is described as being copious, yet laudable in color and consistency. The wounds caused by the ball healed kindly, and rendered no further annoyance. At the end of two months from the time of receiving the injury, the splint was removed, and it was found

that the fragments had united firmly, and he was accordingly allowed to move about on crutches. He was transferred to this hospital July 9th, 1863. By actual measurement of the limb, and comparing it with the other, it is ascertained that the shortening amounts to one-half of an inch, with almost perfect motion of the joints. His general condition has been good; many small pieces of bone came away from time to time, and his case bids fair to be most happy in its results.

CASE IV.—Compound Comminuted Fracture of the Thigh caused by a Minié Ball.—Private D. Adams, aged 31 years, belonging to the 19th Regt. Indiana Vols., was wounded at the battle of Gettysburg, July 1st, 1863. The ball struck the inner side of the left thigh, passing on, fractured and comminuted the left femur, and made its exit four inches below Poupart's ligament. (The wound of the thigh was received whilst lying on his back with his knapsack under him from wounds through the right leg and left side.) The fracture of the femur was in the upper third of the bone. The patient states that the amount of hæmorrhage was small, and that the shock to his constitution was slight. He was wounded in the morning, and he remained on the field five days without any attention, before he was carried to the general hospital. The thigh was placed in the anterior suspensory apparatus. The suppuration is described as being copious, yet laudable in color and consistency. The wounds caused by the entrance and exit of the ball healed kindly, and rendered no further annoyance. At the end of one month and a half from the time of receiving the injury the splint was removed, and it was found that the fragments had united firmly with a slight lateral curvature, and he was accordingly allowed to move about on crutches. He was transferred to this hospital November 17th, 1863. By actual measurement of the limb, and comparing it with its fellow, it is ascertained that the shortening amounts to one inch, with almost perfect use of the hip and ankle joints. Since his admission into this hospital the general condition of the patient has improved rapidly, and his case bids fair to be most happy in its results.

CASE V.—Gunshot Wound of the Knee-Joint caused by a Minié Ball (supposed).—Corporal J. Zweifel, aged 23 years, belonging to the 6th Regt. Wisconsin Vols., was wounded at the battle of Gettysburg, July 1st, 1863. The ball struck the outer side of the right leg, in a line between the outer tuberosity of the femur and external tuberosity of the tibia, passing in, fractured and comminuted the right patella, and passed out directly through an opening over the patella. The patient states that the amount of hæmorrhage was small, and that the shock to his constitution was slight; he experienced no pain until the day after. It was between eleven and twelve o'clock in the day when he was wounded, and, according to his statement, he managed to crawl half a mile to a house, where he remained two days without any surgical treatment; he was then carried to the general hospital, and simple dressings applied. He was transferred to this hospital July 19th, 1863; and an examination with the finger found seven small pieces of loose fragments, which were removed, and the limb was placed in an anterior suspensory apparatus. The suppuration was copious, yet laudable in color and consistency; the wounds are healing kindly. At the end of five months from the time of receiving the injury the splint was removed, and it was found that the thigh and leg had not emaciated, and that there was a very slightly perceptible difference between the sound and injured joints. By actual measurement of the limb, and comparing it with its fellow, it is ascertained that there is no shortening. His general condition is and has been very good, and in a short time he will have a very serviceable limb.

CASE VI. Gun-shot Wound of Knee-Joint, caused by a Round Ball.—Sergeant Mahoney, aged 19 years, belonging to the 15th Regiment, Massachusetts Volunteers, was wounded at the battle of Gettysburg, July 1st, 1863. The ball struck the outer side of the left knee-joint, passing through entered the right knee-joint, and passed on frac-

turing the patella, external tuberosity of the tibia, and styloid process of the fibula, and lodged. He was also wounded in the face by a ball entering just above the right zygomatic process, and passing transversely across, made its exit at the left ala of the nose, carrying away several teeth.

The patient states that the amount of hæmorrhage was small, and the shock to his constitution was slight; he at first experienced only a sharp, stinging pain in the face. It was early in the day when he was wounded, and he was removed almost immediately to the General Hospital. He was transferred to this hospital July 15th, 1863, and on examination the ball was found at the styloid process of the fibula. When it was removed, on introducing my finger I discovered fragments of loose bone, which were removed, and proved to be the styloid process of the fibula, a portion of the external tuberosity of the tibia, and several pieces of the patella. The right limb was then placed in the anterior suspensory apparatus. The suppuration was copious and laudable in color and consistency. The wounds have healed kindly, and render no further annoyance. At the end of four months from the time of receiving the injuries the splint was removed, and the limb was found by actual measurement to be of the same length as its fellow, though emaciated; but there was no perceptible difference in the knee-joints. His case promises to be most happy in its results, and a very useful and serviceable limb.

His general condition has improved rapidly.

LETTER FROM DR. PETERS.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—In connexion with the very interesting cases reported above by Dr. Miles, I take the liberty of adding my recent hurried observations in examining twenty-five gun-shot compound fractures of the femur.

The men were all rebels, and were wounded at the battle of Gettysburg. They had been treated till recently in the neighborhood of the field, and were sent to a hospital in this city used for prisoners of war, and were on their way to be exchanged. I had but a short time to examine their individual cases, and consequently cannot give details. The men were lying side by side in one large ward, and presented a sight rarely met with in military surgery. Each case was accurately measured by me, and the greatest amount of shortening was found to be four inches, while the smallest amount was about one and a quarter inches. The average was over two inches, and in only one instance was there no lateral or backward bowing of the thigh. At least three-fourths of the cases had more or less lateral bearing at the seat of injury, and in the remainder the union had taken place in a zigzag manner. In one of the cases a vast amount of new bony matter had been thrown out, causing an immense bony callus, larger than I had ever before witnessed in similar cases, inclining me to consider it an involucrum, containing a sequestrum. My time was so limited that I was enabled to look at only a few of the wounds, but they were all (six months after the injury) still open, and were discharging various quantities of pus. It was thought that in several of them there was no more dead bone to come away, and that the wounds were closing. Not one of the men was able to get out of his bed, although, after considerable effort, the majority could raise their limbs and exercise them unassisted, showing the fragments had united. Three or four of the cases, it appeared to me, would eventually have to submit to amputation, as their limbs were useless from deformity, and extensive disease of the bones at the seat of the fractures. I noticed that in two of the cases the femoral artery had been ligated in Scarpa's space, in order, as the patients said, "to stop the bleeding," which was secondary. At least one half of them had been wounded in the lower third of the limb (these were the most favorable cases), while the others had their fractures located at the middle and upper thirds (these last were the most seriously wounded). The general condition of all the men was far above my expect-

tations of finding them, considering they were prisoners of war, and liable more or less to nostalgia. They were cheerful, and freely expressed the hope that their limbs would be saved and that they would prove of service to them. The treatment they had received was, in my opinion, in conformity with the laws of conservative surgery, yet it seemed to me had a little more care been given to extension and counter-extension there would have been less shortening and deformity. In no surgical cases are the surgeon's exertions more taxed than in these, and he must be an expert dresser if he desires favorable results. We are taught by these and similar statistics how much reparative power nature truly possesses under even mental depression.

DEWITT C. PETERS,
Assistant Surgeon U. S. A.

EPILEPSY OF RETINA, AND ITS CONNEXION WITH GLAUCOMA. By JULIUS HOMBERGER, M.D.

IN the first part of the fourth volume of the Royal Ophthalmic Hospital Reports will be found an article by Dr. J. Hughlings Jackson, of London, entitled: "Observations on Defects of Sight in Brain-Disease." The caption which I employ for the present communication, though it may well strike as a novelty the minds of thinking members of the profession, partially finds its justification in that article; and its appropriateness will, I hope, become patent on a careful consideration of the subject.

Before entering on its discussion, I must bring to the notice of my readers two of the more recent doctrines of pathological neuro-physiology. These doctrines, it is true, are at the present moment still merely hypothetical, but emanating from two physiologists of such eminence as Brown-Séquard and Donders, they rightfully claim our respectful attention, of which they will yet become more worthy if further researches and direct experiments prove the practical connexion which I shall endeavor to establish between them. Should future observation confirm a relationship in the pathogenesis of epilepsy and glaucoma, or rather show these two diseases more than analogous, *i. e.* identical as affecting the visual apparatus, this fact, with the two theoretical propositions made by the physiologists named, independently of each other, will be most fruitful for the advancement of neuro-pathology.

Donders supposes that the influence of certain nerves produces an increase of secretion of the fluid contents of the eyeball, and that such influence gives rise to that peculiar form of ocular disease called glaucoma simplex. Before Donders propounded this theory, glaucoma was considered an inflammatory disease causing intra-ocular pressure, and its numerous symptoms—dilatation of the pupils, loss of sensitiveness of the cornea, excavation of the optic nerve, perceptible pulsation in the retinal arteries, etc., etc., were accounted for as depending upon such pressure. To this latter symptom particularly I draw the reader's attention for my present purpose. This hypothesis of Donders, that nervous influence is the cause of an increase of secretion in glaucoma, it will be seen hereafter must be somewhat modified. I intend to show that nervous influences produce contraction of the branches of the retinal artery, and that by the diminution of the quantity of blood in the vessels, or by the diminution of lateral pressure in the arteries, a partial vacuum is produced, which in its turn induces hypo-secretion of the choroid.

The tension of the fluids of the eye is in the normal state much less than that of the arterial blood. A considerable pressure may be exerted on the eyeball without interfering with its arterial circulation; only after the pressure becomes so great that with the appearance of the arterial pulsation during the diastole of the heart the arteries of the papilla remain blood-empty, the tension of the fluids of the eye

becomes nearly equal to that of the blood. If, as direct experiments have shown, an increasing pressure is exerted on a normal eye, the moment arterial pulsation appears, as shown by the ophthalmoscope, the visual functions are impaired. The effects of manual pressure on the eyeball are thus shown to be identical with the periodic impairments of vision in glaucoma simplex, for it is immaterial whether nervous influence or pressure from without, by causing contraction of the retinal arteries, produces a lessening of the circulating blood.

Brown-Séquard's theory referred to is, that during epileptic attacks the loss of consciousness is coetaneous with contraction (relative emptiness) of the blood-vessels of the brain. The cause of this contraction must, I take it, necessarily be sought in nervous influence.

Now, J. Hughlings Jackson, in the article already referred to, suggests for visual disturbances preceding epileptic attacks, or occurring idiopathically—in which he has found emptiness of the retinal vessels—the term epilepsy of the retina, and I regard this designation an exceedingly happy one. With him we may argue "just as the man (a case of epilepsy mentioned by him, in which blindness was one of the symptoms) had had epilepsy and loss of function of the brain, so we might say he had temporary epilepsy of the retina or optic nerves."

The following case is related by Dr. Sackown as an instance of epilepsy of the retina:—"One morning Julia W., a middle-aged woman, came to me, saying that for five whole minutes she was blind. She was at the time seated, peeling potatoes. Her blindness came on suddenly. It was not total darkness, but 'dark,' which was the word she used herself in describing it. It was not from failure of accommodation. I asked her to look through a very strong convex-glass. It was not like that, she said. It was not spots, nor specks, nor clouds, nor colors. When I saw her a minute afterwards, she could read well with each eye, and the fundus of each, as seen by the ophthalmoscope, was normal. She had headache across the forehead, which continued the next day. She said it felt 'tight' across the forehead. She had no giddiness. She was regular, but subject to dyspepsia."

I have myself had three attacks of this trouble, of which the first particularly alarmed me very much, and will always be visibly remembered. At the time they occurred I considered them as the consequence of temporary choroidal hyperæmia. Now I do not hesitate to call them attacks of retinal epilepsy. In May, 1861, while lying on a lounge at home, on the southern side of the street, with a large garden opposite, reading a newspaper of small print, I suddenly saw a cloud passing between me and the paper, which, within a few moments, expanded and enveloped me in a kind of semi-obscurity of a dark grey-greenish color. I could not see my hand before my eyes, the obscurity was uniform, whether I turned my head against the window, or towards the background of the room. I remained lying on the lounge for some minutes, the cloud changing neither in color nor in extent, when suddenly—my eyes were widely open—the figures of the carpet appeared indistinctly before me, and soon the other objects in the room became gradually visible—the visual field enlarging from downwards upwards. In a few seconds the whole trouble had disappeared, and I could resume my reading. My right eye is amblyopic (acuteness of vision $\frac{1}{3}$) in consequence of a slight diverging strabismus, my left one myopic ($\frac{1}{3}$). The right eye does not participate in the "common act of vision." Twice since, in August and September, 1861, I again had similar attacks, which lasted about as long as the first, and ended always in a clearing up of the cloud from the lower part of the field of vision. The third attack took place while I was walking in the street. The attacks were not attended by pain, or any sensation in the head or eyeball. My health has always been perfect, and I do not know of any primary cause to which I might attribute the trouble.

There is no doubt that such cases have been frequently described by patients to physicians and ophthalmic surgeons, and were considered by the latter either as momentary

symptoms of congestion, produced by general disturbances, or as the consequence of dazzle, or as troubles of accommodation. The absence of inflammatory symptoms in the eye, even when examined with the ophthalmoscope, the complete recovery of vision after a very brief period, and the frequent exaggeration of the symptoms of disease by patients, are the reasons why these temporarily occurring attacks of blindness have not attracted the attention of oculists, particularly since the invention of the ophthalmoscope and the scientific determination of the different anomalies of accommodation and refraction have directed so many industrious workers towards the elucidation of these the most complicated derangements known in medicine.

(To be Continued.)

LIGATURE OF THE SUBCLAVIAN ARTERY.

PERFORMED BY PROF. ARMSBY, OF ALBANY.

By M. R. PECK, M.D.,

OF GLENNS FALLS.

MR. JOHN FERGUSON, of Glens Falls, Warren Co., N. Y., had his right arm shattered, by the accidental discharge of a cannon, on the 7th day of July, 1863. He was twenty-eight years of age, of sound health, and of large robust frame. Gangrene commenced on the 2d day, and on the 3d I amputated near the shoulder, assisted by Drs. Holden, Ferguson, Sternberg, and Littlefield.

The stump healed kindly, and on the 12th day after the amputation, he was able to go out, and soon after resumed his usual active business pursuits.

His health remained good until September, when he began to have pain and swelling of the stump, which continued until the 10th day of November, when I detected the pulsation of an aneurismal tumor. It increased rapidly, elevating the bones of the shoulder, the pectoral muscles, and filling the axilla. The skin soon after gave way, and he lost, by a sudden and rapid hæmorrhage, between two and three quarts of blood. He fainted, and became nearly pulseless; the opening was closed by compress and adhesive plasters. The only chance now of saving his life, was by ligature of the subclavian artery above the clavicle, and Dr. James H. Armsby of the Albany Medical College was requested to perform the operation.

The operation was performed on the 19th of Nov., 1863, assisted by Drs. Ferguson, Sternberg, and myself, of Glens Falls, and Dr. Little, of Fort Edward, and Mr. Armsby, of Albany. The patient was placed on his back, with his face turned to the left. The first incision was about half an inch above, and parallel with the superior border of the clavicle extending from the sterno-mastoid to the trapezius muscles, and exposing the superficial cervical fascia and the platysma-myoides muscles. The second incision was vertical along the posterior border of the sterno-mastoid, intersecting the first at the margin of this muscle. In elevating the superficial fascia and the platysma-myoides, it became necessary to apply a ligature to the external jugular vein, and divide it, as it could not be sufficiently retracted without danger of laceration. Three branches of the supra-scapular and deep cervical arteries bled profusely, and required ligatures. The clavicular attachment of the sterno-mastoid was unusually broad, and one-half of it had to be divided, to reach the scalenus-anticus at its attachment to the first rib. The deep cervical artery was held upwards the supra-scapular artery, and the subclavian vein carefully depressed, and the great subclavian artery fully exposed, as it emerged from between the scaleni muscles. In separating the artery from the great veins, which covered and inclosed it, a slight gurgling sound occurred, as if air was entering the circulation. This was a moment of intense anxiety, as such an accident might have been instantly fatal. A bit of sponge was pressed against the part, and as no constitutional disturbance followed, the operations proceeded. The artery was found in a healthy state, and the ligature was cast around it with Mott's

aneurismal needle. The situation of the artery was unusually deep, from the elevated position of the shoulder, by the tumor; but every person present had a distinct view of it, before the ligature was tied.

The chief difficulties and dangers of the operation consisted in the following circumstances. The great size of the tumor thrusting upwards the bones of the shoulder; the distension of the surrounding parts; the great size of the veins which covered and enveloped the artery; the large nerves of the axillary plexus liable to be included in the ligature, and the danger of the introduction of air into the circulation. The pulsation in the tumor ceased as soon as the ligature was drawn, and the patient improved rapidly under the use of tonics. The sac gradually diminished until the 19th day after the operation, when it became more painful, and the skin or a portion of it gave indications of sloughing. Dr. Armsby was again sent for, opened the sac, and removed nearly a quart of coagulated blood. The case has progressed favorably; the ligature came away on the 29th day, and the recovery has been rapid and complete, so far as the operation is concerned. There is a slight watery discharge from the sac, which is rapidly diminishing.

GLENNS FALLS, WARREN CO., N. Y., Jan. 20, 1864.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, Oct. 14, 1863.

DR. D. S. CONANT, PRESIDENT, IN THE CHAIR.

ENLARGED PROSTATE.—PUNCTURE OF BLADDER.

DR. BUCK exhibited a specimen of enlargement of the prostate, with hypertrophy of the bladder, which he had removed from an old gentleman, 70 years of age. The patient had suffered for many months on account of difficult micturition. Of late he had suffered from retention, and when Dr. Buck first saw the case he found that the bladder was distended as high up as the umbilicus; the patient, however, suffered no pain or inconvenience. An attempt was made to afford relief with a good-sized catheter, but the instrument, after passing as far as the prostate gland, was turned very decidedly to the left side, and slightly rotated on its axis. The fenestra of the instrument became clogged with blood, and it was thought that the difficulty was occasioned by that circumstance. At a later visit Dr. Buck went provided with a flexible instrument, which followed the windings of the urethra, and succeeded in reaching the bladder and evacuating it. The third day after, Dr. Buck was called again to the patient to relieve him the same way, the attending physician having in the meantime made a similar attempt and failed. At that visit the bladder was still more distended than formerly; still there were no symptoms of constitutional disturbance evident. Dr. Buck also failed to reach the bladder, and after using a smaller instrument was forced to tap the organ through the rectum. An exploration per rectum discovered a symmetrical enlargement of the prostate, but this of course gave no indication of the condition of the gland within the neck of the bladder. The patient continued to be relieved by means of the instrument (which was of extra length) through the rectum, but did not survive the operation more than four or five days. In performing the operation it was necessary to advance the point of the instrument beyond where the finger could touch. The trocar being withdrawn within the canula, the instrument was conducted on the finger as far as possible, then the point was pressed firmly upwards, aiming it in the direction of the umbilicus; urine then flowed through the instrument.

The bladder was hypertrophied and dilated, and there was very considerable enlargement of the prostate. This

gland was developed more on the left than right side, which explained the reason why the instrument was deflected to that side when introduced. The enlarged portion is sessile, and is not pedunculated. The usual enlargement of the gland is such that the middle lobe, acting as a valve, places the obstruction directly in the median line. The bladder was free from peritoneum for an inch above where the puncture was made.

DR. SANDS related a case of puncture of the bladder in a patient of Dr. Parker. The bladder was enormously distended, and a trocar was introduced through the rectum and thrust in the direction of the bladder, and yet no urine followed its introduction. On re-introducing the instrument, and directing the point higher up, the resistance gave way, and the urine escaped. Dr. S. was disposed to think that the instrument in the first instance entered the prostate instead of the bladder. The patient lived some time afterwards, and eventually died of perineal extravasation of urine, though no mischief directly followed the dry tap.

DR. PARKER referred to the case of an old man who suffered from retention of urine, and had such an enormously enlarged prostate that it was impossible to introduce the trocar by way of the rectum. He then had recourse to the supra-pubic operation for puncture, with a good result. In the course of a few days the patient passed his urine through the natural passage, and lived many years afterwards. Dr. Parker asked Dr. Buck if he had ever performed a similar operation. Dr. Buck replied in the negative. He, however, related the case of a boy in that connection, upon whom the operation had been performed on account of an impassable traumatic stricture, occasioned by falling from a loft astride a barrel. The patient was admitted into the hospital for the purpose of having an operation performed, and at that time was in the habit of emptying his bladder by means of a small reed, whittled down, and introduced into the opening. An operation was performed upon the stricture with complete success.

DR. KRACKOWIZER stated that in Vienna no surgeon ever thinks of tapping the bladder through the rectum, but always above the pubes. He thought it was altogether the best plan.

DR. CONANT saw a boy suffering from traumatic stricture caused by falling astride a fence, who had been tapped fifty different times through the rectum by Dr. Thayer.

INTERESTING CASE OF A SUPPOSED ABSCESS COMMUNICATING WITH THE BLADDER.

DR. CLARK presented a small quantity of yellowish colored, curdy fluid, which was passed by a gentleman having the following history:—The patient was 70 years of age, and had suffered from that peculiar affection of the nervous system which compelled him to run when he wanted to walk, his mind being clear. He gradually lost his ability to walk about through the occurrence of certain symptoms like dizziness and cerebral oppression, and took to his bed.

After a little while, being a patient of Dr. Vandever, Dr. Clark was invited to see him. The patient's face being swollen, his mind not entirely clear, with slight swelling about the limbs, Bright's disease was suspected, but the examination of the urine failed to detect the presence of casts. The urine, however, was albuminous. The symptoms remained about the same for a couple of weeks. The patient then had retention of urine. The Dr. passed a common catheter without difficulty two or three times, and at length found all of a sudden, without any circumstance that he was able to remark, though he could pass the instrument as before, no urine flowed. He had succeeded in emptying the bladder on Monday morning; on Friday afternoon he brought Dr. C. a material which looked very like curdled milk after rennet has been added, and stated that it had escaped through the catheter. On microscopical examination it was found to be composed almost entirely of fibrillated matter, with a small proportion of pus. Dr. Vandever was of course desirous to know what it could be,

as no urine had flowed since the Monday morning before. Dr. Clark met the Doctor in consultation the next day; in the meantime an attempt had been made to pass the catheter, and had, as before, failed to draw off any urine. During the day, though a considerable quantity of the curdy material was passed, some of it had escaped upon the thigh, while more was saved for inspection which had been passed on a towel while at stool. It being considered a surgical case, Dr. Buck was called in on the evening of that day (Wednesday). Dr. Buck attempted to pass a large catheter, and was unsuccessful. The next day Dr. Buck came prepared to puncture the bladder, but first attempted to pass the catheter, and succeeded. The bladder had risen nearly to the umbilicus and spread to the sides. At this time, immediately on the catheter coming home, about half a pint of this material seemed to be forced out of the catheter with a good deal of facility, and afterwards urine flowed to the amount of a quart and a pint, and then the catheter was closed again by a blood-colored curdy material. A larger instrument was then used, and this became clogged also. The Doctor then thought it advisable to desist in his attempts until the next day. Dr. Clark did not see the patient again, he having died in the course of the next day. No autopsy could be obtained. Now the question arose as to what was this curdy material. A conjecture was expressed that in neither of these instances did the catheter pass fairly into the bladder, but into a sac made by an abscess, and that the urine flowed only after the sac had been emptied. Dr. Clark's belief was that the instrument did enter the bladder, but that that organ was the receptacle of the pus discharged from an abscess which emptied into it. This matter, being of greater specific gravity than the urine, filled the lower portion of the bladder, and was consequently first drawn off through the catheter, and afterwards followed by the urine. There were, however, no symptoms of abscess during life, and Dr. Buck's finger introduced into the rectum failed to make out anything extraordinary. In answer to a question from a member in relation to the pathology of the nervous trouble with which the patient was afflicted Dr. C. stated that he was unable to give the pathological anatomy of the disease. It most probably had its seat somewhere in the brain. The symptoms which marked its presence were characterized by a shuffling gait, with a leaning forward of the body, a continuance of which for a given time compelled the patient to run.

DR. PEASLEE agreed with Dr. Clark in his view of the condition of the genito-urinary organs, and DR. CONANT was disposed to favor the idea that the pus had its origin in the kidney.

PERITONITIS—INTUS-SUSCEPTION.

DR. CLARK also presented portions of intestine removed from a gentleman sixty-five years of age, a patient of Dr. Henschell. About five weeks ago this gentleman ate seven or eight peaches down town, and immediately afterwards drank a quantity of iced Seidlitz water. He was soon after seized with vomiting and colic, and went home. He suffered from these symptoms several days, and Dr. Henschell, who was called to him, found that the bowels were very tympanitic, and that the intestines could be seen in large cylinders through the abdominal walls. There was also a certain degree of dulness on percussion in the right iliac fossa, and some tenderness elsewhere, but not enough for peritoneal inflammation. On the sixth day of the attack Dr. Clark was asked to see the case, but by some mistake Dr. Henschell did not meet him at the appointed time. Dr. Clark, however, found that new symptoms had developed themselves since the Doctor's visit, in the shape of vomiting of fecal matter. This symptom had shown itself twice; in the first vomiting there was ejected nearly a quart of feces, and in the second nearly a pint. Dr. Clark met Dr. Henschell at eight o'clock that evening. The Doctor then said that he had given cathartics and injections, and had obtained some movement of the bowels from the latter. He had inflated the intestines also by means of car-

bonic acid gas. The apparatus, which was a very ingenious one, was so contrived as to allow a given quantity of water to find its way to a dry mixture of tartaric acid and bicarbonate of soda. The carbonic acid thus generated was conducted by means of an india-rubber tube and rectal pipe into the rectum. No benefit had resulted from this procedure. The next day, towards night, it was concluded to try again the efficacy of the carbonic acid injection. This was done for an hour at a time, after which the gas escaped at the side of the tube. Directly after this a pretty large injection of warm water was used, and when this came away, a considerable quantity of gas only was discharged. From that moment the patient did not vomit any more stercoraceous matter. A small movement of the bowels was effected in the course of the evening. The next morning a full dose of castor oil was given, which caused four movements during the day. From that time also there was no trouble with the bowels. A few days after vomiting occurred, but not of stercoraceous material, and little by little the patient lost strength, until he finally died.

A careful inquiry was made at the second visit of Dr. Clark as to the existence of any previous peritonitis, but elicited nothing. As there was no hernia the diagnosis rested either upon the existence of an intus-susception or of an internal strangulation, the result of a bridle of false membrane. In this examination the caput coli was found underneath the liver; the ileum came off from it, and descending and passing backwards where the caput coli usually is, was apparently constricted by bands of membrane. Rising out of this iliac fossa it passed upwards across the median line, and under a bridle formed between two knuckles of the ileum. This latter was the strangulation portion.

The idea concerning the relief of pain by the inflation was, that the inferior portion of the strangulated intestine had by some means been looped over again, leaving a sort of knot. That portion of the intestine was reduced nearly to the size of the end of a blowpipe.

ENCHONDROMA OF OS BRACHII—AMPUTATION.

DR. KRACKOWIZER presented an arm which he had removed by amputation at the shoulder-joint, a week before. The patient, a very muscular man, had fractured his right arm at the junction of the upper and middle third, somewhat more than two years ago, and was treated at the New York Hospital. There seems to have been some trouble in getting the fractured portions in apposition. In about five months after the accident he could use the arm as well as ever. About one year ago, while wrestling with a comrade, he struck his arm against an unresisting body, and fractured it. He was again treated in the New York Hospital, and was compelled to wear an apparatus for an unusual length of time before he could use it well. In about four or five months after, the arm commenced to swell, and continued to do so gradually until before the amputation. The swelling was principally confined to the lower extremity of the os brachii, was pyriform in shape, and just above the elbow at its largest circumference measured twenty-six inches. The surface of the swelling was more or less irregular, and at the points of the greatest protuberance there was elasticity and fluctuation. The skin covering the tumor was natural, with the exception of being plentifully supplied with veins. The motion in the shoulder-joint was free, although the patient had evidently not the power to elevate the arm. The upper limit of the tumor ended rather abruptly in the situation of the latissimus dorsi and pectoralis major muscles. The right forefinger was very much disfigured by an irregular knotty substance, although its motion was free. This condition of the finger had existed from boyhood. The patient presented no general cachectic appearance. Dr. Krackowizer viewed the case as one of enchondroma of the os brachii, and proposed amputation at the shoulder-joint, which was consented to.

The muscles were found stretched over the mass in thin longitudinal bands. The disease had evidently commenced in the medullary substance of the bone, and pushed the cortical portion before it. At the point of fracture the periosteum only was displaced, and formed a thin bony case for the tumor at that point. Throughout the whole extent of the tumor, from the spongy surface of the head of the bone almost down to the elbow, were large spaces filled with a soft material. On microscopical examination the specimens taken from the more solid parts presented the true characters of young cartilage; the other structure was granular, and somewhat fibrillated. There were also seen empty cells, looking very much like cartilage cells, but with very large nuclei, and having drops of oil in their interior.

A similar growth had commenced to show itself in the third phalanx of the finger alluded to, showing a tendency to the formation of such tumors throughout the body.

Dr. Krackowizer lastly presented the tibio-tarsal articulation removed by amputation from a patient thirty years of age, who had suffered from ankylosis since boyhood. The amputation was performed in consequence of recent periostitis. The specimen showed exceedingly well the stalactitic formations which served to obliterate the joint. The joints in Chopart's line were unusually mobile.

The Society then adjourned.

American Medical Times.

SATURDAY, JANUARY 30, 1864.

HEALTH AFFAIRS OF NEW YORK.

THE recent grand exposé of the fraud, corruption, ignorance, and inefficiency which reign in the New York City Inspector's Office, by MR. CARR, one of the highest officials of the Department, created no surprise among our citizens. Though that chamber, where presides one head of our city government, has hitherto been as silent as the grave, and its affairs as impenetrable to the public gaze as the future, yet the humble citizen has long regarded it as the very sink of official malfeasance. Trite as is the subject of the public health, we cannot let this remarkable paper pass unnoticed. It is the most extraordinary document ever laid before the Common Council, for it is the complete turning inside out of a branch of the city government hitherto hermetically sealed. It is a frank, full, and candid confession of "guilty" to the charges so frequently brought forward by the friends of reform.

MR. CARR's first letter is a searching and scathing criticism of the City Inspector, and a full and impartial revelation of the frauds practised by the Chief and his subordinates. It also contains many most valuable suggestions with reference to the great questions of reform. MR. CARR is evidently a man of good sense, with sound practical ideas. We cannot better give his views on the more material questions which interest those who have made the sanitary wants of the city, and the present health organization a study, than by quoting some portions of his first communication.

MR. CARR very justly remarks at the opening of his letter, "that we have no Sanitary Department in the city at all commensurate with what the name implies. Beyond even this pretence, the city is as barren of all means to guard against disease, pestilence, or contagion, as if such

emergency had never been provided for. Unsuccessful as have been previous City Inspectors in charge of this department, he believes that it is now far worse under the administration of the present incumbent. In the first place, he adds, the present incumbent lays no claim to the possession of those literary qualifications which are, to a great degree, necessary to the intelligent discharge of his duties as a custodian of the public health. This being the case, how is it possible that duties calling for the use of a peculiar intellectual experience can be faithfully performed by this officer? With these admitted disqualifications, it is impossible that he can intelligently direct those under him, and from a consequent unwillingness to take advice from those who, from experience, are competent to advise, nothing is done, and the health of the city is left to take care of itself. This is a sad state of things," he continues, "but the description is by no means an exaggerated one. Under other circumstances the propriety of these remarks might be questioned; but here their introduction is unavoidable; for it must be understood that the success of our sanitary system depends more upon the intellectual qualification and capacity of the City Inspector to clearly understand and direct affairs than on any other rôle. From his personal knowledge, MR. CARR states, "that for the last six months not a sanitary measure has received attention beyond the cleaning of the streets. For all practical purposes," he adds, "it had been as well if no Sanitary Department were in existence, and yet the city pays for this neglected duty \$113,000 annually for salaries and \$20,000 for contingencies, which latter is purely an election fund. \$60,000 taken from this \$113,000, properly applied, would be all-sufficient to give full efficiency to the labors of this department. And yet, with this immense fund at command, and yearly expended, the startling fact presents itself that at least two thousand lives are annually sacrificed in this city owing to the absence of all system in our sanitary regulations. Besides, there is a greater amount of sickness in this city from year to year, population considered, than in any city in the Christian world. The fact cannot be concealed, however it may be varnished over; and it is the knowledge of these facts that gives a certainty to the expression that this state of things, bad as it is, will yet be worse, if the health of the city remains to be tampered with by an irresponsible, indifferent, and selfish body of politicians. Qualifications or fitness to office, so far as my experience extends, are the very last considerations with these men. The Board of Aldermen still claim the right to appoint and remove, and this right is cheerfully acceded by the City Inspector. Political and personal consideration are the only guarantees to success, and the usefulness of the parties thus selected to discharge the responsible duties intrusted to them can be readily conceived.

"The present City Inspector is impressed with the one idea, that if the streets are kept clean there is nothing more to do, and, under the present management, nothing more can be expected. On an examination of the annual sanitary reports of England or France, the mind is astonished by the vastness of research, investigation, and scientific elaboration which these reports contain, and yet, strange to say, street-cleaning, instead of being the all-absorbing feature of these documents, is not even mentioned. But with this department, of late, it is the only consideration, inasmuch as it involves the expenditure of hundreds of thousands of dollars annually. Take from it the work of street-cleaning and all control over the cleaning of the streets, confining it simply

to sanitary affairs, and it would be the least sought after by our politicians, or any of the departments of the city. And to this complexion it must come at last, if the health and lives of the community are worthy consideration."

MR. CARR gives at length the proofs of the truth of his statements, and concludes as follows:—"The department should be converted into a purely sanitary one, and be removed as far as possible from the influence of politicians. The wonder is not that the mortality of the city is so great, but that it is not greater, considering the little attention it is permitted to receive by those intrusted with its keeping. Until the sanitary affairs of this city are placed beyond the reach and influence of politicians, aldermen, and speculators, no reforms are to be expected."

In the paragraphs above quoted MR. CARR has struck the key-note of sanitary reform. We must have a clean Board of Health, free from all partisan influence. It must be composed of men of large intelligence, ample knowledge of sanitary science, and of well known reputation for honesty and executive capacity. Such a measure should be brought forward without delay, and the opportunity which this thorough sifting of the City Inspector's Department has created, be seized to urge it through the Legislature. We see in this stunning blow at official corruption in the City Government the bold and determined hand of MAYOR GUNTHER. We hope he will not rest here, but that with efficient measures he will supplant the corrupt and worthless apology of a Health Department which now disgraces our city.

ANNUAL REPORT OF THE CITY INSPECTOR OF NEW YORK.

THE returns of marriages, births, and deaths, made in 1863, show: marriages, 3,272; births, 6,426; deaths, 25,196. The report of births and marriages is so defective and imperfect as to be of no importance. It is to be regretted that medical men do not conform to this law. Our vital statistics will never be really valuable until they do so. The increase of deaths, as compared with 1862, is 3,952. This increase of mortality is regarded by the City Inspector as less than might be expected, when considered in relation to the actual population of New York in 1863. The resident population he estimates at one million; and the floating population at two hundred and fifty thousand. To the influx of strangers, which has been unprecedented, is attributed a very large number of deaths. A large number of soldiers, who have been discharged from the army as invalids, and incapacitated for further service in the field, have died in this city. During the summer some 40,000 soldiers were encamped in our city and in our public parks, and by creating a great deal of filth, and closing these parks, necessarily tended to increase the ordinary ratio of mortality. Emigration to this Port was unusually great in 1863, amounting to 150,000—double that of 1862. Another prominent cause of increase of mortality, was the filthy condition of our streets at midsummer. And finally, the riots of July led to numberless deaths of ill and feeble people, whose nervous systems were worked up by the alarm created by these riots, and which tended to accelerate their death. Taking all these conditions, the City Inspector concludes that it is a fair and reasonable conclusion, that the actual mortality among residents of this city, compared with former years, would show a diminution, and not an excess. The entire exemption of the city from all

epidemic diseases during the season is attributed to a benign Providence, and the care taken by the Health Department in regard to the cleanliness of the streets, and enforcing obedience to established sanitary regulations.

The City Inspector brings forward the usual statistics to prove that New York is the healthiest city in the world. In these calculations, the population of New York is assumed to be one-fifth greater than given by the census, and all other cities are limited to their census-population. The incorrectness of such reasoning requires no comment. In subsequent portions of the report, the City Inspector calls attention to the necessity of improved sewerage, removal of slaughter-houses, restrictions in the building of tenement-houses, etc.

AUTHORITY OF MILITARY COMMANDERS OVER GENERAL HOSPITALS.

THE case of Assistant-Surgeon WARREN WEBSTER, U.S.A., tried for disobedience and conduct prejudicial to military discipline, embraces the following facts:—General Canby, commanding the city and harbor of New York, ordered General Brown, commanding the post at Fort Schuyler, to arrest and send to Governor's Island a soldier represented to be at that post. The man being not at the post, but in the McDougall General Hospital, General Brown ordered Dr. Webster, of the regular service, in charge of hospital, to arrest the soldier and send him as before mentioned. The man was at the time confined to his ward by the results of a severe surgical operation just performed, and could not be removed with safety. The surgeon in charge reported to Gen. Brown that since General Hospitals were under the control of the Surgeon-General he considered it his duty to remove patients only when orders came through the Medical Director; and for this report he was put on trial. Orders heretofore given had been through the Medical Director or the Surgeon-General. The court-martial found Surgeon Webster guilty, and sentenced him to "be confined to the limits of his post for six months, and to be reprimanded in General Orders by the general commanding the department." General Dix modified the sentence, confining him to his post for sixty days. This case raises some nice points affecting the position of Surgeons in charge of hospitals. We shall notice them more at length at some future day.

SURGEON-GENERAL HAMMOND.

WE are glad to learn that the severe injury which this gentleman received by a fall at Nashville, is not likely to produce permanent ill effects. At first he was deprived of the use of his lower limbs, but the most serious symptom has in some measure disappeared. It is now confidently anticipated that his recovery will finally be complete.

AMERICAN MEDICAL ASSOCIATION.

THERE are abundant indications that the next meeting to be held in New York, in June, will be one of the largest ever held. From all parts of the country we hear the note of preparation. The profession of New York have for some time been making arrangements to render the meeting in the highest degree a success. Societies throughout the country should appoint delegates at an early day, to give ample time for preparation.

WM. D. MURPHY, M.D., has been appointed Commissioner of Health of New York, by Mayor Gunther, in place of Dr. Jedediah Miller.

Correspondence.

VIRGINIA STATE LUNATIC ASYLUM, WILLIAMSBURGH.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR—Thinking that some of the facts observed by me respecting the Virginia State Lunatic Asylum might prove interesting, perhaps useful, I take the liberty of forwarding to you the following extracts from notes which I made when on duty in the vicinity of that institution.

I found the buildings situated in the best part of the city, of imposing appearance, surrounded by a most beautiful park of upwards of eleven acres in extent; beautiful flower gardens, through which, in proper weather, the inmate patients are allowed to exercise, that is, those of them whose physical and mental condition will admit of their so doing. The buildings themselves are fairly adapted for their purpose, the rooms for the most part being large and airy, the patients thus having plenty of air both in and out of doors.

The entire number of inmates in the asylum is 232, divided as follows: 230 are lunatic patients, 18 are white nurses and attendants, 34 are colored servants.

In years gone by, this was the best institution of the State, forty thousand dollars having been annually appropriated for its support; some years, indeed, the appropriation reached as high as sixty thousand. All of the inmates are citizens of Eastern Virginia, their families being without exception rebels.

During the early days of the present rebellion the State cut down the appropriation for its support, and, as our army made its first advance up the Peninsula, the rebels retreating before it, after the battle of Williamsburgh, so gloriously won by Generals Hooker and Hancock, this institution was deserted by its rebel surgeons and most of the nurses, thus falling helpless in our hands; and, as our lines passed on inclosing it, the asylum became a pauper, very proper for us to support. Our Government at once appointed a surgeon as superintendent, attendants and nurses were procured, and the full care of the institution and its inmates was at once assumed.

Soon after Western Virginia formed its own State Constitution (since admitted into the Union), the Governor, Mr. Pierpont, visited the asylum and assumed its charge; he appointed a surgeon, attendants, nurses, &c., in place of those previously appointed by the U. S. Government, relieving (partially for a time) the United States of its care. During the disastrous retreat of McClellan from before Richmond it was thought that the entire peninsula would be abandoned by us; the new appointees of the Western Virginia Government, being loyal Virginians, all fled, fearing death if they fell into the hands of the rebels, notwithstanding their humane care of the poor lunatics. Consequently, and for the third time, the care of the institution changed hands, and for the second time the U. S. Government assumed its charge, which it has ever since retained. Dr. Peter Wager was appointed (and is now in charge) as surgeon and superintendent, during the month of March last. Upon the occasion of one of my visits, I visited the kitchen of the asylum, just as the dinner was being served—good soup, fresh beef, pork, potatoes, a fine article of bread in abundance; some of the rebel attendants were chagrined at my finding so good a meal prepared. The following articles I found on hand, and being issued daily to the patients:—Fresh beef, salt beef, pork, bacon, wheat bread, flour, corn meal, beans, potatoes, rice, salt, molasses, tea, and coffee, besides a variety of vegetables; it was stated that all of the above were of good quality.

On the recommendation of Major-General Keyes, approved by Major-General Dix, there were being sent up to the institution two-third rations, which were found quite ample, the fact being well established that the full ration as issued to our army is more than sufficient for the heartiest of our

soldiers in the field even when undergoing the most severe labor and exposure; if for a moment we take into consideration that most of these patients are quite aged and feeble, and quite one-half are females, while none perform severe labor, or out-of-door work of any kind, we can at once see the utter impossibility of any starvation, or suffering for food.

Dr. Wager, who has been in charge nearly or quite a year, considers the rations good and sufficient; he denies that any suffering has ever occurred from lack of food or clothing. Dr. Todd, of the 5th Penn. Cavalry, who has had temporary charge occasionally, has always found the allowed food abundant, and the clothing quite ample.

I have myself visited the Asylum on three different occasions, and have always found the rations ample and good, the patients being as well cared for as is usual in our own hospitals. I have on several occasions furnished them with supplementary supplies, Sanitary Commission wines, brandies, chocolate, and condensed milk, hospital clothing, dried fruit, etc., etc, such as the Commission furnishes our military hospitals.

Unfortunately the former clerk of the Asylum, an unscrupulous fellow, named Moore, was retained (I believe at the instance of certain disloyal citizens of Williamsburgh), and from him I find many false reports have started, as to lack of food, etc. Aided by a few rebel nurses he constantly circulated such reports. What reliance is to be placed upon his word may be easily judged; at first he was a noisy rebel, then he took the oath of allegiance to the United States Government, thereby retaining his position. When General Wise made his raid into and took possession of the city of Williamsburgh, this man, Moore, stole a large quantity of food, clothing, hospital stores, etc., etc., property furnished for the lunatic patients, and getting safely away with them has since opened a store, a few miles within the rebel lines! At one time he took upwards of twenty boxes well filled with valuable stores.

While the rebel General Wise was in possession he actually sent to General Keyes asking that he (Keyes) would still continue his care of the Asylum, as he (Wise) could not feed them! His wish was complied with, and the spectacle was presented of our own wagons, loaded with Union stores, going within the rebel lines under a flag of truce, to feed the poor lunatics. The good care heretofore exercised towards this institution and its inmates still continues.

Yours, etc.,
JULIUS NICHOLS, M.D.

WASHINGTON, D.C., Jan. 5, 1864.

INCORRECT DIAGNOSIS OF SYPHILIS.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—Permit me to inquire, with regard to the case of "Necrosis of Bodies of Cervical Vertebrae," reported upon page 43 of the present volume of your journal, by what right or what shadow of reason, it is denominated "syphilitic?"

We are told that the patient had a "sloughing chancre on glans penis eighteen months ago, in consequence of which one-third sloughed away." We are not informed that there were subsequent secondary symptoms, or any well marked tertiary manifestations to indicate that the necrosis was really dependent upon syphilis. The words above quoted constitute the only venereal history vouchsafed us. Are we then to believe that a man may have "sloughing chancre"—a sore now known to have in most cases, nothing to do with syphilis, and to be not a true chancre but a chancroid —, and eighteen months after may cough up the anterior arch of his atlas as a consequence of syphilitic infection and without intervening symptoms? A case so extraordinary is unique in the annals of surgery!

Now, Mr. Editor, allow me to protest in the name of New York surgery against such shallow reasoning *post hoc*

ergo propter hoc, and to express the opinion that if this case has been correctly and fully reported, the vomiting of the atlas had no more connexion with the preceding sloughing sore than it had with the breakfast which the patient ate or did not eat the previous morning. The notions generally prevailing with regard to syphilis are already confused enough, as everybody knows. Pray let us not have them worse confounded by the report of cases so ill digested and misnamed as this.

I would also call your attention to a manifest error in diagnosis in the first case (that of A. C.) headed "tertiary syphilis" upon page 30 of your issue of Jan. 16th, in which the short period (three months) elapsed since the development of the chancre, the "sore throat with ulcerated points," and the cervical glandular engorgement, shows that the "pains in the bones and head" were the rheumatoid neuralgia, so-called, of early secondary syphilis, and did not belong to the tertiary stage of this disease.

Yours, etc.,

ALIIQUIS.

NEW YORK, Jan. 23, 1863.

Obituary.

JOHN C. DALTON, M.D., OF LOWELL, MASS.

THE Medical profession of Massachusetts, and to a certain extent that of the whole country, have met with a great loss in the death of John C. Dalton, M.D., of Lowell, who died on Saturday, January 9th, 1864, in the sixty-ninth year of his age. Very few medical men who have not been connected with medical teaching or authorship have made themselves more generally known, and still fewer have been as highly esteemed as Dr. Dalton. He was, indeed, the type of the *medical gentleman*, honorable in character, courteous in manners, of integrity that no man doubted or could doubt; amiable and affectionate in all the relations of life. Such men the medical profession can ill spare. True, he had attained a good old age, and we might deem that his work was done, and well done; still his living example was an influence for good to all around him. Such and so useful was the life, the termination of which we now deplore. Dr. Dalton was born in Boston, May 30, 1795; entered Harvard College in 1810, and graduated with high honors in 1814. Among his classmates were Judge Merrick, Rev. Dr. Walker, afterwards President of the College, and the historian Prescott. It was a trait in the character of Dr. Dalton, marking the steadfastness of his kindly feelings, that he retained to the close of his life his interest in his class-mates; his very last act previous to the accident that robbed us of him was to hand to a classmate in Connecticut the recently published memorial of Prescott.

Having adopted medicine as his future profession, he attended his first course of lectures in the Mass. Medical College, his second in the University of Pennsylvania, where he graduated in 1818. He commenced practice in Chelmsford, in 1824, but removed in 1831 to Lowell, where he continued in active business for twenty-six years, commanding the best practice of the city, and the highest place in the confidence of his fellow-citizens and his brethren of the medical profession. For several years he was one of the councillors of the Mass. Med. Society, and president of the District Society. He was often chosen delegate to the National Med. Association, and attended its meetings with an interest which never flagged. In 1857 he left Lowell, and took up his residence in Boston, retiring as much as possible from practice, but still called upon by many old friends. His interest in his profession continued to the last, and he took an active part in the organization of the new City Hospital, of which he was Chief of the Medical Staff. Dr. Dalton was twice married, and left five children; two of whom have embraced the medical profession, and have already given proof that they are not unmindful of what

that profession has a right to expect from the sons of such a father.

Dr. Dalton had to the last so much the appearance of fine health that his friends might well hope that many years of usefulness were still before him: *Sed aliter visum est*. A fall upon the ice produced an internal injury, on which pneumonia supervened, and proved fatal on the fourth day.

"Peace to a good man's memory."

C. R. G.

Army Medical Intelligence.

COURT-MARTIAL ORDERED IN THE CASE OF SURGEON-GENERAL HAMMOND.

THE following order has been issued from the War Department:—

WAR DEPARTMENT, ADJUTANT-GENERAL'S OFFICE, }
WASHINGTON, D.C., January 16, 1864.
SPECIAL ORDERS, No. 24.

[EXTRACT.]

19. By direction of the President, a General Court-Martial is hereby appointed to meet in this city at 12 o'clock M. on the 19th day of January, 1864, or as soon thereafter as practicable, for the trial of Brig. Gen. W. A. Hammond, Surgeon-General U.S.A., and such other prisoners as may be brought before it.

Detail for the Court.

Major General R. J. Oglesby, U.S.V.
Brig. Gen. W. S. Harney, U.S.A.
Brig. Gen. W. S. Ketchum, U.S.V.
Brig. Gen. G. S. Green, U.S.V.
Brevet Brig. Gen. W. W. Morris, Colonel 2d U. S. Artillery.
Brig. Gen. A. P. Howe, U.S.V.
Brig. Gen. J. P. Slough, U.S.V.
Brig. Gen. H. E. Paine, U.S.V.
Brig. Gen. J. C. Starkweather, U.S.V.
Major John A. Bingham, Judge Advocate, Judge Advocate of the Court.
No other officers than those named can be assembled without manifest injury to the service.

By order of the Secretary of War:

E. D. TOWNSEND,
Assistant Adjutant-General.

WAR DEPARTMENT, ADJUTANT-GENERAL'S OFFICE, }
WASHINGTON, January 2, 1864.
GENERAL ORDERS, No. 2.

The percentage of men allowed to be absent at one time under the authority given in General Orders No. 391, of 1863, to grant furloughs to enlisted men in hospitals, is changed from five to twenty per cent.

By order of the Secretary of War:

E. D. TOWNSEND,
Assistant Adjutant-General.

WAR DEPARTMENT, ADJUTANT-GENERAL'S OFFICE, }
WASHINGTON, January 4, 1864.
GENERAL ORDERS, No. 2.

The Hospital and Ambulance Flags of the Army are established as follows: For General Hospitals, yellow bunting 9 by 5 feet, with the letter H, 24 inches long, of green bunting, in centre.

For Post and Field Hospitals, yellow bunting 6 by 4 feet, with letter H, 24 inches long, of green bunting, in centre.

For ambulances and guidons to mark the way to field Hospitals, yellow bunting 14 by 28 inches, with a border, one inch deep, of green.

By order of the Secretary of War:

E. D. TOWNSEND,
Assistant Adjutant-General.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., January 14, 1864. }
CIRCULAR LETTER.

The Board of Medical Officers, assembled at the City of Philadelphia, for the purpose of examining the different models submitted to them for an Artificial Arm, having

reported in favor of Selpho's Model for cases of amputation below, and the Lincoln Model above the elbow joint, you are authorized to order artificial arms, from these manufacturers, for soldiers who may be entitled to receive them, under the same instructions as heretofore published for artificial limbs, the price not to exceed fifty dollars (\$50).

In compliance with the recommendation of the Board, when a soldier may desire to purchase "the more elegant and expensive arm of Palmer," fifty dollars will be allowed towards payment for the same, upon a written application to that effect to a Medical Director, who will satisfy himself that the transaction has been carried out in good faith.

By order of the Acting Surgeon General:

C. H. CRANE,
Surgeon U.S.A.

ORDERS, CHANGES, &c.

A Board of Inspection to consist of Colonel George D. Engle, A. A. D. C. and Surgeon R. B. McCay, U.S.A., is appointed to inspect the men at the Draft Rendezvous, Mason's Island, D. C., and report by name those unfit for service at the time they were accepted, together with the cause and degree of disability.

Major O. A. Mack, A.D.C., and Captain 13th U.S. Infantry, is assigned to duty as Secretary and Treasurer of the Soldiers' Home. He will report to the Governor of the Home in person, and relieve Assistant-Surgeon B. King, who will turn over to him all the records, funds, and property pertaining to the Home, in his charge.

The leave of absence granted Assistant-Surgeon J. T. Brown, 94th New York Vols., in Special Orders No. 302, current series, Headquarters 1st Army Corps, has been extended ten days.

Leave of absence has been granted Surgeon W. P. Johnson, 18th Ohio Vols., to enable him to attend the Legislature of Ohio, of which he is a member.

The resignations of the following officers have been accepted by the President, to take effect as follows:—

Surgeon A. P. Meylert, U.S.V., January 5, 1864.

Hospital Chaplain Ed. D. Neill, U.S.A., January 4, 1864.

John A. Roderigo, of Pennsylvania, James M. McMasters, and Grove M. Willis, of Illinois, Charles Redfield and Wm. T. Evans, of Maryland, Thomas Brown, 4th U.S. Artillery, George Blinkhorn and Jas. K. Dunbar, of Pennsylvania, Henry J. Anderson, of New York, and Clark H. Griggs, of Connecticut, have been appointed Hospital Stewards in the U.S.A.

So much of Special Orders No. 438, series of 1863, from the War Department, as dishonorably mustered out of the service of the United States, Surgeon George W. Avery, 11th New York Artillery, has been revoked, and he is honorably discharged, to date from the consolidation of the regiment to which he then belonged, and the disability for his reappointment is removed.

Assistant-Surgeon Simon C. Snrger, 6th New York Cavalry, dismissed by Special Orders No. 516, series of 1863, from the War Department, is restored to his former position with pay from the date at which he rejoins his regiment for duty, provided the vacancy has not been filled, evidence of which must be obtained from the Governor.

The leave of absence granted Chaplain W. C. Smith, U.S.A., from Headquarters Department of the Ohio, December 31, 1863, has been extended ten days.

The permission to delay reporting to his regiment, heretofore granted Assistant-Surgeon R. P. Thoms, 89th Illinois Vols., a released prisoner of war, is extended ten days.

Surgeon John McDonald, U.S.V., now on sick leave at New York city, has been ordered to report to the Board for the examination of sick officers, now in session at Cincinnati, Ohio.

So much of Special Orders No. 5, of January 5, 1864, from the War Department, as directed Surgeons Cyrus N. Chamberlain and Charles L. Allen, and Assistant-Surgeon B. W. Pease, U.S.V., to report to the Major-General commanding Army of the Potomac, to relieve Surgeons Charles O'Leary, Thomas Sim, and George L. Hancock, U.S.V., respectively, is so amended as to direct Surgeons Chamberlain and Allen, and Assistant-Surgeon Pease, to report to the Major-General commanding Army of the Potomac for assignment to duty, and to relieve Surgeons O'Leary, Sim, and Hancock.

Medical News.

THE New Jersey State Medical Society held its annual meeting at Camden, on Tuesday last.

DR. SAYRE, Resident Physician of New York, has reported the Park Barracks in a disgustingly filthy condition.

DR. BAUER, late Health Officer of Brooklyn, has yielded his claim to that position, and Dr. Jones succeeds to the office.

THE Court-Martial of Surgeon-Gen. HAMMOND is now progressing. The Court sits with open doors.

Original Lectures.

LECTURES ON GUNSHOT INJURIES OF THE HEAD.

By FRANK H. HAMILTON, M.D.,

PROF. OF MILITARY SURGERY AND FRACTURES AT BELLEVUE HOSP. MED. COLLEGE, AND LONG ISLAND COLLEGE HOSPITAL; SURGEON TO BELLEVUE HOSPITAL; LATE MEDICAL INSPECTOR, U.S.A.

LECTURE I—PART I.

GENTLEMEN—Before entering upon the consideration of gunshot injuries of the head, I must call your attention to certain anatomical peculiarities in those parts whose lesions we are about to study.

The integuments of the scalp are dense, firm, inelastic, composed in a great measure of cellulose-fibrous tissue, which bind them very firmly to the occipito-frontalis tendon over the top and sides of the head; they are highly vascular, and lie expanded upon a broad, smooth, and convex surface of bone. The scalp is covered with hair, whose bulbs project far into the subjacent areolar tissue.

The occipito-frontalis tendon, broad, firm, and fibrous—spread out between a large portion of the integument and the skull—is united, as we have seen, to the skin very closely, but to the pericranium very loosely.

The cranium, invested immediately by the pericranium upon its outer side, and by the dura mater upon its inner side, is composed in the adult of two plates, an external and an internal plate, with an intermediate diploic structure. The external plate is thin and tough; the internal plate is thicker but more brittle. The diploic is vascular, and abounds especially in venous sinuses. Between the two periosteal membranes, the pericranium and dura mater, there is an intimate vascular communication. The dura mater is firmly adherent to the inner plate in early life, but much more loosely in middle life. The inner surface of the skull is grooved at various points by arteries and venous sinuses; and sometimes the arteries, as for example the arteria media meningeae, course in a complete canal formed in the walls of the inner table.

The brain is invested by three separate membranes, each possessing a distinct anatomical character, namely the dura mater—a fibrous membrane, and which has been already mentioned as the internal periosteum—the tunica arachnoides a serous membrane, and the pia mater a vascular membrane.

The brain itself, of a most delicate and fragile structure, supported by various duplicatures of its membranous envelopes, occupies all of the remaining space within the skull, except that which is necessarily occupied by its numerous afferent and efferent nerves and vessels.

The brain is the organ of the mind, and one of the great fountains of life. There are three principal sources or centres of animal existence, namely, the cerebro-spinal centres, the lungs, and the heart, and of these the cerebro-spinal axis seems to be the chief; it is that which especially presides over all the others.

Many of the peculiar results consequent upon injuries of the head will find an explanation in the anatomical conditions which I have now briefly declared. Some of these peculiar results I will attempt to indicate.

When the integuments of the scalp have been severed, and have once been withdrawn from each other at the point of separation, they are not easily replaced; and if an attempt is made to replace them and maintain them in position by sutures, the tension will often cause the sutures to cut out, and will greatly increase the tendency to inflammation in the adjacent tissues.

When vessels which have been divided, have been allowed to retract within this dense structure, it will be difficult to seize and secure them; but compression can be applied much more effectually here than elsewhere, on

account of the breadth and smoothness of the bony structure underneath.

The fact that the scalp is prone to erysipelatous inflammation, is probably due to the dense fibro-cellular character of its structure.

Slight wounds bleed freely, for the reason that its vessels, although not large, are very numerous.

The compactness of the skin, together with the firmness with which it is bound down to the occipito-frontalis tendon, explains the peculiar form of the swellings caused by slight blows upon the head, and in which the skin is not broken. The blood-vessels, lying exposed upon this flat or convex surface, and being very superficial, are easily ruptured; and when the blood has escaped from the vessels, it cannot pass readily from one point to another in the areolar tissue, but the extravasation becomes limited, and the tumor which is found is round, abruptly defined, and elastic; indeed, it resembles very much a common encysted tumor. It is very unlike similar effusions in most other portions of the body. For example, if a blow is received upon the arm, and blood is effused, the swelling is diffused; and the same is the fact, usually, in all other parts except where a bone lies immediately subjacent to the skin.

The facility with which these blood-vessels are ruptured, will enable us to understand that we cannot always judge of the amount of injury, or of the force of the blow, by the degree of swelling.

The depth to which the bulbs of the hair are projected into the skin causes them to project sometimes upon the under-surface, when the scalp is torn up; and in a few instances I have seen them drawn fairly through upon the under-surface, in such a way that if the scalp was laid down before their removal they would be found to act as foreign substances and prevent union by first intention. They must therefore be seized by the forceps and drawn out, and this can only be done by taking hold of them from below.

If blood is effused under the occipito-frontalis tendon, between it and the pericranium, when the cellular tissue is very loose, it is very broadly diffused generally, and in this way may be easily distinguished from effusions of blood between the tendon and the skin. The truth is, however, that few vessels lie in this situation, and bloody effusions under the tendon are comparatively rare. But at a later day it is not very uncommon to find here effusions of pus, which dissect up the aponeurosis extensively, and do great mischief before they reach the surface. Occasionally these abscesses are mistaken for fractures accompanied with depression, pus having been poured out, but being limited by fibrinous effusion around the margins of the purulent deposit. This outer fibrinous wall is high and precipitous on its inner circumference, but gradually inclines downwards on its outer circumference to the level of the adjacent sound skin, so that when the finger is slid across the scalp it rises imperceptibly to the summit of this inclined plane, and there falls off abruptly as from the edge of a crater. The fibrinous elevation is mistaken for the skull, and the solid bone at the bottom of the soft purulent deposit is supposed to be a fragment of the skull depressed.

Even a collection of half-fluid blood, after the lapse of two or three days, when the parts have become inflamed and swollen, will sometimes lead to the same error.

If pus forms under the pericranium it is again circumscribed; indeed, it is in general more circumscribed than is the primary effusion of blood outside of the aponeurotic tendon of the occipito-frontalis.

Blood is very rarely found effused between the pericranium and skull. The formation of pus at this point is indicated by the following circumstances. After the lapse of several days from the receipt of the injury a small puffy swelling appears, accompanied with considerable tenderness and some pain. The original injury may have been very slight, or more severe, and the pain with tenderness may have persisted from the moment of the receipt of the injury, or it may have been first noticed at the period of the formation of the matter. What especially characterizes the

formation of matter at this point is the occurrence of the swelling at a late date, and its circumscribed form; and, if the pus continues to accumulate, or if the disease progresses, that portion of the outer plate of the skull from which the pericranium is separated, will die and exfoliate; eventually also the capillaries, which establish a communication between the outer and inner tables, will convey the inflammation inwards, and pus will be deposited between the dura mater and skull. In this way sometimes apparently trifling accidents prove ultimately fatal.

In other cases the order of events appears to be reversed, and the inflammation, with the consequent suppuration beginning within the skull but outside of the dura mater, is subsequently propagated to the pericranium. The tumor which forms under the scalp has the same form and general characteristics, but it is preceded by signs of irritation or of compression of the brain, such as dilatation of the pupils, strabismus, restlessness, partial paralysis of one or more of the extremities, convulsions, coma, &c.

Let us now, gentlemen, make a brief synopsis or resumé of these epicranial tumefactions, and at the same time notice briefly the various indications of treatment to which they give rise. First, *effusions between the skin and occipito-frontalis tendon*, of which there are three kinds; thus a swelling occurring immediately after the receipt of an injury, distinctly circumscribed in its form, round, abruptly elevated, elastic, sometimes of a bluish color, is known to be an effusion of blood between the skin and the tissues immediately subjacent. This is the form of accident which happens so often with children, and which you have seen illustrated in the case of the man brought into my division at the Bellevue Hospital a few days ago. He has upon his head two of these swellings, one of which is upon his forehead, and quite large. The accident was the result of the fall of a pile of wood upon his head. He received a momentary concussion of the brain, but soon recovered his senses completely; under the application of cool water lotions continued three or four days, these swellings have entirely disappeared. This is the only treatment which I recommend to you in similar cases. The blood is in general speedily absorbed, but not while it lies accumulated in mass. Gradually it becomes diffused into the surrounding tissues, and as the diffusion occurs the absorption slowly takes place.

A second form of tumefaction, having the same anatomical relations, occurs a little later, and is the result of inflammation. This is composed of serum and fibrin, and its characteristics are too well known to require a more special description. Occasionally, also, the primary blood swelling or the later inflammatory swelling may result in the formation of pus. In either case the matter points readily, and its evacuation by the knife is easily accomplished. The surgeon is very likely to be deceived, however, by certain changes, which sometimes occur in these primary blood swellings, by which he is led to suppose that suppuration has taken place, when the fact is otherwise. In consequence of the gradual separation of the serum from the fibrin, which latter is deposited with the clot around the circumference of the cavity, the tumor grows soft and fluctuates in its centre, giving to the touch a sensation very much as if it contained pus; but in general, the diagnosis may be corrected by ascertaining whether the present condition has been preceded by much soreness, pain, and throbbing; and especially by observing that if pus has formed, the tension of the skin has been steadily increasing, while, if it is only blood and serum, the tension has been gradually diminishing.

Second. *Effusions between the occipito-frontalis and pericranium*.—Primary effusions of blood, I have declared to be rare at this point; swellings from inflammation are more common, and their results, namely, suppuration and sometimes gangrene, are very destructive. Both the primary effusions of blood and the effusions of pus at a later period may be mistaken for fracture with depression. All forms of effusion at this point are characterized by diffusion.

The treatment first and imperatively demanded in either case is early and free incisions; after which, cool or tepid water fomentations to control the inflammation. Of course, the surgeon will not neglect such constitutional measures as bleeding, cathartics, low diet, and absolute rest, according as one or the other may seem to be required.

Third. *Effusions between the dura mater and skull*.—Here we seldom notice a swelling except as the consequence of the formation of pus, the tumefaction occurring as late as the 7th, 8th, or even 14th day; being preceded, accompanied, or followed by pain, tenderness, and signs of cerebral disturbance; the latter always indicating that the brain or its meninges is implicated.

The treatment consists in the early evacuation of the pus by opening freely to the bone; and if there is reason to suppose that pus has formed underneath the bone, the trephine must be applied, although it will be admitted that very little encouragement can now be given that this, or any other operation, will save the life of the patient.

Original Communications.

THROMBI IN CARDIAC CAVITIES.

By W. M. DORRAN, M.D.,

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WHILE on duty as Ward Surgeon at the Union General Hospital, in this city, during the past summer and fall, I met, in making post-mortem examinations, with several cases of thrombi in cardiac cavities. Perhaps the following particulars, although imperfect, may be sufficiently interesting for publication. I propose referring to eight cases, only three of which belonged to my ward, and one, No. 7, also came under my charge a week before death.

CASE I.—H. H. Whitney, private, Co. D, 53d Mass. Vols., a discharged soldier (I believe), on his way home from New Orleans, being unable to proceed further, was admitted into Union Hospital, August 15th. He was quite a youth, of slight build, hair and eyes light-colored. He had been in hospital, but had convalesced, and was a good deal improved when he started from New Orleans. On the second day of his journey he became very ill. On admission he was found very much prostrated, and presented symptoms of typhoid, with diarrhoea. On the second day after admission, left parotid gland became much inflamed; third day, he complained of pain in the breast; crepitation was detected on the left side anteriorly. He died on the fourth day.

Autopsy made ten hours after death.—Half-pint of serum found in each pleural cavity; the two layers of right pleura rather firmly adherent; recent deposit of coagulable lymph on left pleura, connecting both lobes of the lung. Inferior portion of superior lobe of left lung hepatized. Thrombi were found in cardiac cavities, and they extended into the vessels connected with the heart. The liver and spleen were found enlarged and very much congested. Peyer's patches and the solitary glands were diseased, presenting black dots like recently shaved beard.

II.—George A. Spriggs, private, Co. C, 119th Illinois Vols. I first saw him four days previous to death. He was much prostrated; mind very dull; countenance flushed; temperature of the surface not increased; tongue coated; bowels sluggish; heart beats 110 per minute, sounds muffled, action labored; pulse weak, the stroke appearing double; dyspnoea very great; sibilant and sonorous râles all over both lungs; crepitation over the right lung anteriorly; resonance somewhat diminished all over, especially where crepitation existed. He died the eighth day after admission.

Autopsy twelve hours after death.—Lungs congested, but spongy, except the lower portion of the upper lobe of the right lung, which was hepatized. Bronchial tubes con-

tained a large quantity of muco-purulent matter, and their lining membrane was much congested, giving evidence of inflammation. Pericardial sac contained $\frac{3}{4}$ ij. of serum. Thrombi in the cardiac cavities, extending into the vessels; the thrombus in the pulmonary artery was branched, corresponding to the branches of the artery. The liver weighed over six pounds, and was of a blue color; spleen weighed twenty-three ounces, was dark blue.

III.—James Martin, Co. C, 113th Illinois, admitted into Ward A (not mine), Oct. 16th; was then affected with diarrhoea and hæmorrhoids, but not seriously. 26th.—Abdomen became tympanitic and painful; dysuria existed, for which the catheter was used; turpentine stupes and emplastrum cantharidis gave considerable relief in the course of twenty-four hours, but the symptoms recurred again next day with greater severity, and the pain extended up into the thorax; dyspnoea and orthopnoea became severe; pulse became weak and frequent. He died November 1st.

Autopsy twenty hours after death.—Both layers of pleura on the right side firmly adherent; lungs congested, but spongy; pericardial sac contained four ounces of serum. Thrombi in cardiac cavities, extending into vessels; liver considerably enlarged; spleen eighteen ounces.

IV.—A patient in Ward A, November 5th, became affected with double pneumonia; the dyspnoea was very painful. He died November 7th. He had been an invalid for about one year; was affected with diarrhoea and intermittent fever at different times during that period. He was pale and somewhat emaciated, and had diarrhoea, not severe, just previous to the attack of pneumonia.

Autopsy sixteen hours after death.—There existed a deposit of coagulable lymph, nearly half an inch thick in some places, on the right pleura; posteriorly the upper portions of the pleural membranes adhered quite firmly. No effusion into pleural cavities. The whole of the right lung, except a portion about the size of a man's fist at the apex, was completely hepatized; indeed, the inferior lobe was more solid than the tissue of healthy liver; inferior half of left lung hepatized, remainder congested; lobes adherent by coagulable lymph. Pericardial sac contained three ounces of serum. Cardiac cavities contained thrombi similar to previous cases. Liver about six and a half pounds in weight; spleen eighteen ounces.

V.—John Cramer, private, Co. A, 118th Illinois, in June last had an attack of bilious fever, and subsequently had intermittent fever (he says). On admission, Sept. 28th, he presented a waxy paleness of the skin, had oedema of the lower extremities, torpidity of the renal function, and some diarrhoea. In the course of a few weeks the diarrhoea was relieved, but abdominal dropsy began to develop. Diuretics were tried, but the kidneys could not be stimulated to action. Diarrhoea returned, and he lingered on. About Nov. 1st the stomach became very irritable; he vomited his food frequently, became prostrated, and all his symptoms were aggravated. About this time he began to complain of soreness of the throat in the laryngeal region. Stupes and counter-irritation were inefficacious. In a few days dysphagia supervened. He became affected with a severe cough, and had copious viscid sputa; a cardiac murmur existed, heard most distinctly at the apex. His symptoms increased, and he continued to sink until 8th November, when he died.

Autopsy sixteen hours after death.—The epiglottis, glottis, and vocal cords were hypertrophied, so that the entrance into the glottis and the rima glottidis was diminished nearly one-half. The mucous membrane of the larynx and trachea, and of the bronchial tubes, was much congested, showing signs of inflammation. The right pleural cavity contained two pints, the left one pint of serous fluid; the lungs were congested, but not hepatized. The pericardial sac contained about four ounces of serum. Cardiac cavities of the left side of the heart contained thrombi. Edges of the mitral valve were thickened, to one of which a thrombus was adherent. The mucous

membrane of the ilium, cæcum, and colon, was inflamed. The lower portions of the colon and rectum were hypertrophied, the canal was narrowed, and the glands were much enlarged. The mesenteric glands were hypertrophied. The abdominal cavity contained about three quarts of serum. The kidney indurated; liver would weigh about five pounds; the spleen twelve ounces.

VI.—George N. Gully, private, Co. F, 120th Illinois; was a convalescent from bronchitis in Ward C (not my ward). He was able to walk about and go out for a few weeks previous to Nov. 15th, but on that day he was attacked rather suddenly with thoracic difficulty, attended with pain and dyspnoea. The ward surgeon was unable to come to a positive diagnosis, for physical exploration revealed to him no positive symptom. Anodynes were prescribed, and gave some relief temporarily. He died November 17th.

An Autopsy was made ten hours after. The lungs were healthy; about two ounces of serum in pericardial sac; the heart cavities were found to contain very large thrombi; the thrombus found in the right heart weighed six drachms; a ribbon-shaped thrombus extended from the left ventricle into the aorta, measuring about twelve inches in length; the liver was hypertrophied, about six pounds in weight, and quite friable, so that the texture was easily lacerated or torn by the fingers; the spleen was about twenty-seven ounces.

VII.—Alvey M. Black, private, Co. C, 52d Ills., admitted November 14, with chronic diarrhoea of two months' standing. He was very pale from anæmia; had lost flesh; was much debilitated, and his bowels moved eight to ten times in twenty-four hours. In the course of a couple of weeks his diarrhoea was somewhat relieved, but he still continued very weak; after another week the diarrhoea increased again, and he continued to sink until December 11, when he died. For thirty-six hours previous to death his hands and feet were numb and cold. For ten days previous to death a systolic murmur was audible, and the first sound of the heart was of a muffled character; whether or not this existed previously I cannot say.

An Autopsy was made ten hours after death. The lungs were found to present a bloodless appearance, and were not more than half the size usually presented after death by men of his size; the lung tissue was spongy and free from tubercles; pericardial sac contained about two ounces of serum; the cardiac cavities contained thrombi, those in the right heart being the larger; the thrombus, which extended from the right auricle through the auriculo-ventricular opening, was attached to the tricuspid valves, and extended into the ventricle, so as almost completely to obstruct the blood on its onward course; the thrombi in the right heart were small, and attached to the mitral valves; the lower portion of the ilium, the cæcum, and the colon were in a morbid condition, being very easily torn, and the mucous membrane was very much ulcerated; extensive destruction of it had taken place, and where it was not destroyed, it was much thickened; the mesenteric glands were very much enlarged, and many of them indurated; the kidneys were hypertrophied, and of a pale color; the liver was enlarged, and would weigh six pounds; the spleen about twelve ounces; the hepatic tissue was very friable.

VIII.—Owen Gilgin, Q. M. Department, admitted into Union Hospital, November 21, with orchitis. About December 1 he came under my charge; the testicle had nearly returned to health; next day he was attacked with dysentery; had twenty-four stools in twenty-four hours; passed blood each time; he became greatly prostrated; appetite completely gone; tongue covered with a thick brown coat; tenderness in the course of the colon. Counter-irritation to the abdomen was tried; all the vegetable astringents were prescribed one after the other in various combinations; turpentine emulsion was persevered in for several days; the lead and opium pill was tried, also injections of the powerful astringents, and anodynes were frequently given; opium

was largely used per mouth and rectum, but all to no purpose, for the dysentery could not be checked, and blood continued to be passed with every stool; the patient became more and more prostrated, although stimulants were given as much as the stomach would bear; he could get neither rest nor sleep, and died December 14.

An *Autopsy* was made twelve hours after death. The lungs were healthy; the cardiac cavities contained very large thrombi; the lower portion of the ilium was congested; the cœcum and colon were extensively diseased. The condition of the mucous membrane from the ileo-cœcal valve to the anus, was indescribable; to say that it was very much ulcerated, that it was honey-combed, gives but a faint idea of its morbid condition; two-thirds of the membrane were destroyed by ulceration; the one-third that remained was changed and very much thickened; the muscular, cellular, and peritoneal tissues of the colon were six times their normal thickness; the walls of the gut were increased by hypertrophy to such a degree, that the canal was not half its natural dimensions; the mesenteric glands were very much hypertrophied, and many of the largest were indurated; the liver was not much larger than the normal size; the spleen was rather below the normal size.

In reference to the thrombi themselves, it might be said that they are of a whitish color, not unlike fatty tissue, but fine and smooth. The substance is firm and elastic; a portion placed in alcohol for a week was capable of being stretched to double its length, then contracted like India-rubber. It could be torn into fine fibres longitudinally, like white fibrous tissue. These bodies were wider in the auricles than in the ventricles. They usually occupied the cavity of the auricular processes, and interdigitated with the columnæ pectinatæ. In the auricles they are usually one to one and a quarter inch in diameter, of a circular or oval shape about a quarter of an inch in thickness. As they descend they become narrower; in passing through into the ventricle they usually adhere to the valves; then at the apex of the ventricle they are again attached to the columnæ carneæ, and interdigitate with them; then pass upwards out of the ventricular cavities into the aorta, or pulmonary artery. In one case I found it attached to one of the semilunar valves, and the valve was torn. The portion contained in the ventricle is usually about one-half of an inch wide, and is flat. They usually occupy the pulmonary veins near the heart, being a continuation from the left auricle, and also the venæ cavae, especially the descendens, in which it is generally much longer than in the ascending vena cava.

That these bodies are not of post-mortem origin may be quite conclusively inferred from the fact, that they adhere so closely to the endocardium, and also that they interdigitate quite minutely with the columnæ carneæ, which they would not be likely to do if these latter were at rest during their deposit. The portions in the cardiac cavities are always firmer and whiter than portions which extend into the vessels. The distal extremities in the vessels are softer and more colored, more nearly resembling ordinary clot, yet differing from clot in that it is more resisting and tenacious, and the probability is, that it required only time for that portion to become white and firm by destruction of the red blood corpuscles entangled in the material of which thrombi are composed. What that material is, and what the cause or condition is which produces it, are questions for consideration.

In the eight cases referred to, the liver was affected either by increase of tissue or by increase of blood, or by both; it was increased in size; in some cases very much so. In two cases it was quite friable; in two it was of quite a Mazarin blue color; in seven of the eight cases the spleen was either much or very much hypertrophied; and its texture friable in one case; and much bluer than normal in two cases; but in one case it was not increased in size. This proves that they may exist without enlargement of the spleen. The size of the thrombi did not correspond

with the size of the liver, yet the existence of enlargement of that organ, whenever they are present, is a significant fact. Cases in which they are found were, as a general rule, anæmic patients. Bennett has established the fact, that "Leucocythæmia" is caused by diseased spleen and liver. Virchow has established the fact, that whenever the lymphatic glands are affected, either by inflammation in themselves or in organs with which they are connected, there will be hyperinosis (and also leukæmia of the blood), that is, an excess of fibrin forming material present in the blood. This is an important fact in the consideration of thrombi, for in each of the cases above mentioned there was either enlarged liver and enlarged spleen, or enlarged mesenteric glands, or enlarged bronchial glands; which conditions, according to the highest authority, would give rise to leucocythæmia and hyperinosis; and these are the materials most probably, namely: colorless blood-corpuscles (in excess), and fibrin, or fibrinoid (in excess), of which thrombi are composed. Now, when the blood contains these elements in excess, the patient will probably be anæmic, and deposits will form on rough surfaces. Such blood passing through the heart finds a favorable condition in the cavity of the appendix auricularis. There are the columnæ pectinatæ, which offer a convenient nidus for the adhesive material in the blood; for, adhesive it is, as shown by its close and firm attachments when attempts are made to remove it after death. The foundation of the thrombus once laid, a continuation of its development, by deposits from the blood, is a natural consequence; and when the deposit is first made, a good many red as well as white blood corpuscles may be entangled, but, according to Virchow, the red corpuscles lose their color, and become disorganized after a time under such conditions.

PERSULPHATE OF IRON IN DIPHTHERIA.

By P. J. FARNSWORTH, M.D.,

OF LYONS, IOWA.

A CASE of diphtheria occurring in my practice not long since, in which a blister had been applied to the chest previous to the attack, the diphtheritic membrane appeared on the denuded surface.

The throat symptoms were not very severe, but the blister became intensely painful, and all the constitutional symptoms of a severe form of the disease appeared.

Gave tonics and stimulants, as usual in such cases, and made a topical application of nitrate of silver. Found that the caustic did little towards removing the external membrane, from its forming an impenetrable covering by coagulating the albumen. Tr. of iodine seemed more effectual, but produced pain wherever it came in contact with the denuded surface; applied powdered alum, which seemed to act like the nitrate of silver. Hydrochloric acid removed the membrane; but it reappeared; besides, the acid was painful in its application.

Next tried the preparations of iron. Made a solution of tr. fer. mur. 3j. ad aquæ 3j., sweetened with a little honey, to be given every two hours, in teaspoonful doses. At the same time made an application of the solution of persulphate of iron (reduced one-half) to the external membrane. This gave less pain than any of the previous applications; and, after two or three days, removed the membrane permanently. My patient made a good recovery.

While several cases of diphtheria were pending, I accidentally burned the back of my forefinger from the second to the third joint. It was only slightly burnt, and I paid little attention to it for several days; when I awoke one morning with a severe pain in my finger, my hand swollen, and soreness of the axillary glands. Uncovering my finger, I found the injured part covered with a diphtheritic membrane. Made an application of the solid nitrate of silver, and applied a poultice. It seemed to grow worse. Next made an application of the fer. persulphas, which had a solvent power over the membrane, and, after a few applications, the

sore became healthy in appearance, and the inflammation subsided.

Since the above occurred I have had but four cases of diphtheria, and in each have used no other remedies than the tr. fer. mur. and a topical application of the fer. persulphas. All recovered quickly. We are often called to see cases of diphtheria which are wholly beyond the reach of the physician's art from the beginning; but I think that in the curable cases we possess, in the above preparations of iron, as near a specific as we have for most diseases.

I do not mean to say that stimulants or other tonics are to be discarded; but I know of no other article that possesses both the properties of a solvent of the membrane, and is at the same time so valuable a tonic as the sesquichloride or persulphate of iron, and would rather trust them alone against the disease than all the other remedies yet tried.

LYONS, January 1, 1864.

RESECTION OF THREE INCHES OF THE UPPER THIRD OF THE FEMUR—

RESECTIONS OF THE SHAFT OF THE HUMERUS.

By JOHN HOMANS, JR., Asst. Surg. U.S.A.

PRIVATE James Reid, of the 162d New York Vols., was admitted a patient in St. James's United States General Hospital, July 3d, 1863. A few days previously he had been wounded at Springfield Landing, near Port Hudson, during an attack upon that post by the rebels, sustaining a compound gunshot fracture of the right thigh at the upper third. On entrance the thigh was but slightly swollen; the shortening was about an inch and a half. The bullet had entered on the anterior face of the limb, about four and a half inches below Poupart's ligament, and had passed out at a point about four inches below the great trochanter; passing just outside the femoral artery (which vessel was unharmed, and lay towards the median line of the body as compared with the track of the ball), shattering the femur in its passage. I determined to make an effort to save the limb, for experience had taught me how much conservative surgery can accomplish in gunshot fractures of the thigh. A Smith's anterior splint was applied, but it was soon removed, as the patient was uncomfortable; and the limb was placed on a double inclined plane. The orifice of entrance soon healed, and pus, which soon began to be discharged quite freely, flowed out through the lower opening. On the 29th of July, as the patient's condition was favorable for operation, I determined to remove all the necrosed bone possible, and, if necessary, to resect a portion of the shaft of the femur. The patient was placed under the influence of chloroform, and an incision two and a half inches long was made from either side of the orifice of exit in the direction of the long axis of the limb. Several pieces of necrosed bone were removed, and the end of each fragment of the fractured femur was turned out and sawn off with a chain-saw beyond the point where the bone was bare. The periosteum along the course of the linea aspera was carefully preserved and peeled off from the bone, or rather the bone was gently torn away from the periosteum. About three inches of the femur were thus resected. No untoward symptom followed for more than two months, and in October the limb could be raised by the heel, and union was quite firm. About this time he was attacked with erysipelas, which seemed to be caused by the whitewashing of the ward in which he lay; but the attack was slight and soon passed off. In November he could walk about on crutches, and bend his knee slightly. I noticed that union took place first and mainly along the inner side of the bone; and as the periosteum here was preserved entire, there was not so much shortening as would otherwise have resulted, it being only three and a half inches. In December he was discharged from service and sailed for New York. How useful a limb he will have cannot yet be determined, but amputation would have killed him.

RESECTIONS OF THE SHAFT OF THE HUMERUS.

Capt. John Cook, 91st New York, 62 years old, was wounded at Port Hudson on the 27th May, 1863, and entered St. James's Hospital, New Orleans, on the 29th. He sustained a gunshot fracture of the right humerus at the lower third, and on the 31st May two and a half inches of the shaft, from the condyles upwards, were removed by Doctor Avery of the 9th Conn. Vols. He recovered and went home in July, at which time there was no union.

Barnet Swope, 6th Michigan, entered on the 29th of May, having been wounded at the same time as Capt. Cook. On June 2d five inches of the right humerus were removed by Doctor Avery in fragments and by means of the saw. The periosteum was preserved entire; union was firm three and a half months afterwards, and he can now use his arm without splints, and can write. The shortening is three inches.

NEW ORLEANS, La., Jan. 1864.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, OCT. 28, 1863.

DR. D. S. CONANT, PRESIDENT, IN THE CHAIR.

WOUND OF CAROTID ARTERY—USE OF PERSULPHATE OF IRON—AUTOPSY.

DR. MARKOE presented a specimen of the common carotid, external and internal carotid, and part of the subclavian arteries, taken from a patient who was received into the New York Hospital August 17, two days after having received a peculiar wound of the neck. In a fit of mental aberration he stabbed himself with the small blade of a pen-knife, inflicting two wounds, one in the median line, and one two inches to the right of the median line. The precise position of the median wound was over the trachea, about three-quarters of an inch above the top of the sternum. About an inch to the right of this was the other, which was about one-half of an inch above the clavicle. The position of these wounds was not important in reference to the injury of the artery. There was a little diffuse swelling in the lower part of the neck, and a little emphysema; otherwise the patient's condition was pretty good. The emphysema was referred to the slight puncture of the trachea. On the twentieth instant, three days after admission, Dr. Markoe's attention was called particularly to the case; he then found that the region of the outer wound was the seat of a diffuse indurated swelling, which manifestly pulsed. The inference was, that a large artery had been wounded, and that a traumatic aneurism had formed. Ice was applied to the part, and the result was awaited. On the day following, the ice having had some good effect upon the enlargement, it was hoped that after all no large artery had been injured. On the twenty-second it was, however, evident that the tumor was increasing, having encroached considerably upon the deeper structures of the neck, at the same time the trachea was being pushed to the opposite side, causing dyspnoea. The patient said that the wounds were inflicted by striking upwards. At the time a consultation was called, the distension of the neck was so great that the external wound was elevated considerably above the clavicle, so that some of the gentlemen got a wrong impression of the location of the stab. There was a great deal of doubt as to the precise situation in which the artery (the carotid) was wounded. Dr. Markoe's impression was that the seat of injury to the vessel was far down near its origin. There were two lines of action open; one to cut down through the aneurismal swelling, and secure the artery at the bottom by a ligature; the other was to try and secure occlusion by the distal operation. The distal operation was, however, finally determined

upon, and Dr. Markoe applied a ligature upon the common carotid, and also on the internal carotid, in order to secure the recurrent circulation. This, however, had no good effect, for the dilation increased, and dyspnoea became more marked. Forty-eight hours after the operation the Doctor resolved to try the efficacy of the injection of the persulphate of iron directly into the cavity of the sac. A fine trocar was accordingly introduced, when a jet escaped with considerable force, showing what an extent of pressure there was behind. Twenty-five drops of the iron were thrown in, and a coagulum of considerable size was the result—but this had no effect in retarding the dilatation. The day following forty drops were thrown in with the same result. About two hours after the second operation one of his severe paroxysms of dyspnoea came on, and he succumbed to it.

At the autopsy the tissues of the neck around the wound were found enormously swollen, and the trachea pushed strongly to the left side. A mass of coagulum, considerably larger than the fist, was scooped out. In this mass were two egg-shaped bodies of brownish color, and crumbling, which were the coagula made by the iron. One of these, the last made, came so near the artery that the effects of the injection were visible through its coats to the extent of causing a slight amount of coagulation in the blood contained in the artery itself. Throwing aside these clots, the track of the common carotid was seen, and this artery was found wounded on its side about an inch and three-eighths from its bifurcation.

CAPILLARY BRONCHITIS.

Dr. ENOS presented the larynx, trachea, and bronchial tubes taken from a child who died this morning of capillary bronchitis. This history is painfully brief and interesting. The patient was a healthy, robust, and active boy, about four years of age; he seemed to have had the symptoms of an ordinary cold for a few days. Yesterday he was playing about the floor; in the evening he began to breathe hurriedly, and the cough was more hoarse and croupy. I first saw the child last evening about ten o'clock. The mother had given him an emetic of ipecacuanha, and he had just thrown up his dinner; this, together with a warm pediluvium, had apparently caused a profuse perspiration, in which I found him lying; the surface was warm, and the color good; the respiration was hurried, and the pulse rapid, 120 to 130; the cough was too slight for me to tell whether he had the croup, as the parents had supposed; the breathing appeared to be obstructed about the larynx. In answer to some questions the voice was such as led me to infer there was no membranous obstruction in the larynx. As he was in this profuse perspiration, and lying quietly, I did not deem it best to disturb him, in order to make a careful exploration of the chest. In case he should become hot and dry, or croupy, I recommended nauseating doses of tart. antim. et pot. and ipecacuanha. I left rather expecting to find the child better in the morning; he appeared to be in no pain, and his mind was clear. I was sent for about five o'clock this morning, and when I arrived the child was dead. I learned that he continued to perspire freely through the night, with color and warmth good till near the last. He was not croupy, and did not cough much. Just before death the mucus increased rapidly. Some very slight spasms were observable; the respiration grew faster and faster till death closed the scene.

Post-Mortem Examination.—The mucus was seen swelling from the mouth; the air-passages were filled with this frothy mucus—particularly the smaller bronchial tubes throughout both lungs. On washing this off the mucous membrane was seen highly injected, and in a state of acute inflammation, in the larynx, trachea, large and small bronchial tubes; no diphtheritic or croupous deposit was to be seen; the tracheal epithelia were not removed; the lungs were not inflamed—their color was natural, and they were crepitant throughout, except a small portion of one which

was hypostatically congested; the head was not examined, as there had been no symptoms indicating cerebral trouble; the heart, liver, kidneys, and all the other organs were healthy; there was a slight effusion of serum in the pericardium; no other evidences of disease were found.

Death appeared to have been caused by the sudden and copious exudation of mucus into the small bronchi, thus obstructing their calibre already diminished by the turgid lining membrane. The blood, in consequence, failed to be properly aerated, and death was the result.

American Medical Times.

SATURDAY, FEBRUARY 6, 1864.

TRAINING OF RECRUITS.

WITH the approach of spring the tocsin of war again rings through the land, and the people are called to fill up the ranks of our wasted armies. There are many indications that the end of this terrible civil strife is approaching. The Government is evidently about to put forth strength adequate to overcome all opposition, and terminate in a single campaign a war that has already lingered too long. An army of a million of men, the fabulous tale of Xerxes, is about to be realized on this continent. In this final onset upon rebellion, nearly every household in the land is to be represented. The loyal people have already given their Josephs to their country, and now they are called upon to give their Benjamins. And we do not doubt the kind of response which the people will make to this final summons of the President. A million of men will gather at his bidding within the appointed time.

But we cannot contemplate this organization of new armies on such an enormous scale without sad reflections upon the unnecessary waste of health and life which is to follow. What a large proportion will never go to the battle-field? What a vast number will go from the camp of instruction to the hospitals, and from the hospitals will return to their homes invalids for life! How many will never even go beyond the place of rendezvous! Dearly has experience taught us that the people cannot be diverted suddenly from the healthful occupations of peace to the privations, fatigue, and hardships of war, without the immediate sacrifice of a large percentage of the aggregate number. Viewed in a proper light, the dangers of the battle-field are slight compared with the perils of the camp. For one who receives a fatal wound in a battle, a hundred are crippled or die from disease. Thus is lost to the country a large share of the effective strength of our newly-formed armies. Not only is the Government a great loser by this failure of the health of its recent recruits, but the country at large is thereby deprived of perhaps a skilled artisan or laborer.

But is this fruitless expenditure of the health and life of the people who go forth from their homes to fight our battles necessary? We aver not. This waste is the merest extravagance of thoughtless or conceited authority. The diseases of camp are almost wholly preventable by proper sanitary regulations. Diarrhoea, dysentery, fever, scorbutus, and all those allied diseases which so thin the ranks of recruits, are the direct result of errors of diet or

living which may be corrected, and which should never be allowed to exist. But to preserve the health and life of the recruit, and transform him from a sturdy laborer into a stalwart soldier, requires the skilled knowledge of the best medical minds of the country. It is in this transforming process that our military authorities make a most fatal mistake. The recruit is taken from his comfortable home and well filled table, and without the slightest gradation in the change, is at once put upon the coarse fare and stinted ration, and subjected to the fatigues and exposures of the veteran soldier. Thousands who might have been educated to endure the hardships of soldier-life succumb to these extreme changes, and swell the ranks of hospital inmates instead of the army.

The reform needed is, that the places of rendezvous of recruits should be made the transition state from civil to military life. Here the recruit should find proper food, well cooked, and in sufficient variety and quantity. He should not be supplied with an army ration, either in quantity or in kind; the cooking should be thorough, and by skilled persons; his clothing should be warm; his sleeping apartment well ventilated, dry, and comfortable; his exercise should be cautiously adapted to his physical condition. These are simple truths, and their importance is recognised by every candid person. But they will never have a practical application except at the hands of skilled sanitarians. We have not the slightest confidence in laymen. The larger number of depots for recruits have been managed in violation of every law of health. They have been located in unhealthy situations. The soil has been wet, thorough drainage impossible, and winds and sunlight shut out by the slope of the land. As a consequence, rheumatism and diseases of the lungs have been early developed. Again: the barracks have been damp and poorly ventilated, the bunks huddled together and filthy, the water-closets uncovered, and sinks in close proximity to the quarters. The food has generally been poor in quality, deficient in quantity and variety, and so cooked as to be rendered unpalatable and indigestible. The sudden change of food which the recruit suffers, leads to a diarrhoea or dysentery of an obstinate type.

The result of all this official mismanagement is, that the recruit is either completely invalidated, or finally enters the ranks physically incapacitated. The loss to the Government has thus been inconceivably great at every attempt to recruit its armies. Thousands, who with proper early training would have become capable and efficient soldiers, have fallen victims to the diseases induced by the sudden and violent transition from a life of well ordered and systematic labor, and a table teeming with various and well prepared foods, to the wants, privations, and exposures of the camp. We have seen regiments, while waiting in these camps, waste away from the maximum strength to a mere skeleton. This negligence is the more inexcusable because their places of rendezvous are generally located in rich farming districts, where every necessity can be readily and cheaply supplied.

We appeal to our military authorities to heed the experience of the past in the large levy of troops now about to be made. Let the places of rendezvous be made more homelike in everything that relates to the comfort of the recruit. Let him be trained like the pugilist, by slow degrees, departing gradually from his former habits, and slowly accustoming him to severer discipline. The man who car-

ried the ox had to begin with carrying the calf. WINSHIP, who now lifts with ease two tons or upwards, began by lifting a light weight. So may nearly the entire body of recruits be gradually trained to endure, with impunity, the privations, fatigues, and exposures of the soldier's life.

STATE MEDICAL SOCIETIES.

We publish in this number the proceedings of the State Medical Societies of New Jersey and New York. The Medical Society of New Jersey has nearly reached its centenary anniversary, and is maintained with all the vigor of the most recent organizations. The Medical Society of the State of New York is rapidly growing in interest and influence, and promises to become one of the leading medical societies of the country. The late meeting was attended by nearly one hundred members. The State Societies, generally, manifest equal activity. This must be taken as an indication of a most healthful condition of the profession of the country.

MORTALITY OF CITIES IN 1863.

DR. E. M. SNOW, the distinguished Sanitary Officer of Providence, R. I., states that—"The year 1863 was marked by an increased, and in some respects remarkable, mortality throughout the country, in the rural districts as well as in cities. There appears to have been no general or wide-spread epidemic; but a general increase of mortality from all causes. In some sections of New England and in other States, there were severe epidemics of diphtheria, scarlatina, typhoid fever, and spotted fever; and during the present winter there is existing a general epidemic of influenza, commonly, but improperly, attributed to 'taking cold.' This has largely increased the mortality of aged persons, and in some places has proved fatal to many of the middle-aged." He gives the following interesting table:

	Estimated Population.	Deaths, 1863.	Of population One in.
New York,	900,000	25,196	35.7
Philadelphia,	620,000	54,220	43.6
Boston,	194,000	4,693	41.2
Newark, N. J.,	85,000	1,952	43.5
Providence,	55,000	1,214	45.3
Hartford,	32,000	583	54.8

The increase in 1863 in the number of deaths, over the previous year, was as follows:

New York, increase 3,952, or 18.60 per cent.
Philadelphia, increase 691, or 4.57 per cent.
Boston, increase 578, or 14.02 per cent.
Providence, increase 300, or 32.82 per cent.

The population of the cities is given at an increase of about 10 per cent. on the population in 1860. The statistics refute the shallow statements of the City Inspector in regard to the health of New York. With a just allowance for the increase of population, New York appears at even less advantage than in former years. Its death-rate for 1863 is 1 in 35.

VALUE OF SANITARY MEASURES IN ARMIES.

IN the British army we have the most striking illustrations of the value of sanitary surveillance. The frightful mortality from diseases in the Crimean war aroused such noble and philanthropic persons as LORD HERBERT and MISS NIGHTINGALE to the importance of inaugurating sanitary regulations in the Army, and the happy effect was not only then soon evident, but it is still seen, in the greatly reduced mortality in the British army in all parts of the world since that period. The following recently published statistics present the mortality of that army at different points before

and since the Crimean war. In Jamaica it has fallen in the 1000 from 260 to 20; in Trinidad from 106 to 0 (in 1860); in Barbados from 58 to 6; in St. Lucia from 122 to 1; in British Guiana from 74 to 6; in Canada from 16 to 10; in Nova Scotia from 15 to 7; in Newfoundland from 11 to 4; in Bermuda from 28 to 8; in Gibraltar from 11 to 7; in Malta from 15 to 10; in Ionia from 15 to 7. Such a remarkable yet uniform improvement in the health of troops, following the introduction of health measures, should convert the most sceptical to the wisdom of the most stringent sanitary regulations.

THE NEW BRITISH PHARMACOPŒIA.

THIS work has at length appeared. It is said to have been produced at an incredible cost of time, labor, and money. Its cost in money is estimated at \$30,000, though it is but an octavo volume of four hundred and forty-four pages, printed in large type. By an Act of Parliament this Pharmacopœia is substituted for all other similar works throughout Great Britain and Ireland. It will therefore have a large sale. It consists of two parts and an appendix, the first relating to *Materia Medica*, the second to preparations and compounds, and the appendix to articles made for chemical processes in the second part, and not used in medical practice. The *Materia Medica* contains every definite medicinal substance so far approved in practice as to be entitled to a place, each article being fully described. Alterations affecting the strength and doses of dangerous medicines occasioned much anxiety. An attempt has been made to assimilate the strength of preparations of the same pharmaceutical form in order that they may be prescribed in similar doses. This would, if thoroughly carried out, prevent accidents. Thus tinctures made of dangerous ingredients are, with few exceptions, brought to one standard of strength, so that an ordinary dose is from fifteen to twenty-five minims. The work has employed much of the best pharmaceutical talent of England for six years.

Reviews.

THE CRIMEAN WAR, THE BRITISH ARMY, AND MISS NIGHTINGALE. By CHARLES SHRIMPTON, M.D., late Surgeon-Major (French Army), late Surgeon in Chief of Field Hospitals and of the Military Hospital, Sétif, Algeria. Paris: Germer-Baillière; New York: Baillière Brothers. 1864. 8vo. pp. 64.

DR. SHRIMPTON, the author of this interesting sketch of MISS NIGHTINGALE's labors, in their relation to the progress of reforms in military hygiene, has endeavored to set forth the radical sources of those official and departmental defects of the medical and administrative service of the British army that induced the terrible woes and losses which that army suffered in the Crimean campaign. Being himself an enlightened hygienist and a retired medical officer of special experience and skill, the views of this writer command our attention.

The magnitude and the far-reaching influence of Florence Nightingale's labors for the health and happiness of soldiers, cannot be over-estimated, nor will the inquiries and reforms which she has initiated cease to bless the world until the heart of philanthropy ceases to have its sympathies called forth by sufferings of mankind from preventable diseases and uncared for distress. Very justly does Dr. Shrimpton say:—

"It is one of the greatest characteristics of the present age,

that the cause of humanity is become identified with the strength of armies. The history, then, of a war can no longer be confined to bare details of the plaus of battles, and of the manœuvres of armies: we must refer to other elements, and principally to the sanitary condition of troops, as the causes of our victories, or the reasons for our disasters. The historian, in following soldiers in their campaigns, should note everything that may be favorable or unfavorable to their sanitary condition; and consequently he should not neglect any opportunity of exposing every error that may be committed on this important point, from whatsoever source it may spring. There are, particularly, two important results to be obtained from this scrupulous care in compiling the history of a war. The first is, that of reducing to less than half the mortality of those brave soldiers who so generously shed their blood for their country; the second, merely a corollary of the first, that by reducing the mortality of soldiers, the strength of armies will be proportionally increased, and thus very often the fortune of war decided."

Dr. Shrimpton pays a just tribute to the good services of the "Times Correspondent" in the Crimea, and he believes in the utility of fair criticism, even in war times, as a safe and sure means of securing necessary reforms. He says, "The authorities being obliged to see and know things as they really were," found that this was the great step towards the remedy.

The writer takes up the following questions:—

"Why the fine troops, which left England in such admirable condition that the highest hopes were legitimately formed of their success, should have been exposed to such difficulties and privations from the very beginning of the expedition, that they were almost swept away by disease and death, even before they came in presence of the enemy?"

"Secondly, we shall inquire, how the presence of Miss Nightingale in the Hospitals of the British army could so promptly assuage so much suffering and so effectually stop the ravages of those frightful diseases, the focus of which was in the Hospitals, carrying off all the inmates.

"We shall endeavor, thirdly, to point out the causes to which we must attribute the happy change that took place in the sanitary condition of the English troops towards the end of the war—a change so vital as to insure their complete immunity from typhus fever, at the very time this dire disease raged with the utmost violence amongst the French and Sardinian troops encamped in their immediate vicinity."

He plainly shows that a criminally defective system, or rather no-system, of *administration* in army affairs, and a hampered routineism in the medical services, gave rise to the shocking sacrifice of life and health that was suffered in the Crimean campaign; and he takes occasion to present the peculiar advantages of the French system of managing the purely administrative or material affairs under an "*Intendant Général*."

"There was no shelter or comfort of any kind for the sick, which had been foreseen by Mr. Alexander, but what could the efforts of an isolated medical officer avail in an army? It must not be supposed that this painful disorder existed only on the first landing of the troops. Difficulties and privations of all kinds increased, on the contrary, in the British army, as the troops landed, whilst the French had no difficulty nor any kind of privation to meet, because everything had been provided and settled for them by their '*Intendant Général*.' The '*Train des Équipages Militaires*' took charge of their baggage and all the stores they required. As there was no special service of this kind in the British army, they had to wait until '*Arabas*,' a miserable kind of cart, could be procured at great expense and with much difficulty. After all this delay and trouble, there was nothing but confusion and disorder. The distribution of provisions was so irregular and so difficult that often the men could not get any meat at all. The soldiers of the 93rd were obliged to kill the oxen which had brought their baggage on the '*Arabas*' to procure meat for themselves."

Coming down to the events of the first winter, Dr. Shrimpton says:—

"Everything was supplied in abundance, and it will appear strange to a person unacquainted with what an Administration should be, that the army should still have been in want of everything. Things were not within reach when required, and when they were within reach, so many formalities were required

that the army had to suffer the torture of Tantalus. *The Administration had no initiative power*, it was nothing more than a dispensing instrument. Such as it was, however, it was allowed to do its best. The functionaries, with all their zeal and activity, could not overcome the radical defect of their organization, but every kind of assistance possible was given them. This was not sufficient, for we were soon to see another administrative power rise, which, without interfering at all with the original Administration, aided and assisted in supplying many great deficiencies which the regulations had not provided for. This was the mission of Miss Nightingale, who came, in her sublime vocation, to work out the most wonderful reforms in the British Hospitals in the East."

The condition of the sick and of the military hospitals, and what occurred to make the rate of mortality frightful, are graphically set forth by our author. Of the famous Barrack Hospital at Scutari he says:—

"It is impossible to describe the state of the atmosphere in the wards, particularly during the night. The air was vitiated in the highest degree—there was no drainage for the water and filth—no possibility of escaping the horrid smell from the privies, which filled the passages and entered the wards. The floors were always wet and saturated with filth—the walls and ceilings were also saturated with putrid animal matter; rats and vermin swarmed everywhere, and, as there were no night vessels, large tubs were placed in the wards to supply their deficiency! After such an account of the interior, it is scarcely worth while to speak of the exterior of the hospital. The same want of care reigned everywhere."

Claiming that this state of confusion and insufficiency in the British army hospitals inevitably resulted from the absence of a distinct and independent system of military or material administration, Dr. Shrimpton enforces his argument by stating that—

"In the French army everything connected with hospital management belongs to the Department of the Administration. The medical officer has nothing to do with anything but his professional duties, transmitting his prescriptions to the '*officier d'administration comptable*.' Thus the French medical officer is enabled to attend to 300 patients, more promptly and efficiently than the medical officer of the British army can attend to 30."

The marvellous genius and administrative skill of Miss Nightingale, by the high commission of Sir Sidney Herbert, became for the time the much needed supplementary power of an "*Intendant Général*" for the hospital service. And Dr. Shrimpton has very delicately presented a luminous and instructive sketch of that noble woman's history in respect of her long and thorough course of preparatory training for such work. Though no other woman since the world began has had such a preparation for such a work, her record is one that many of our countrywomen may profitably study. Indeed it is a subject for instruction to the medical profession. The sketch which the author has given of this lady's work, and of her providential and earnest training for it, renders his book peculiarly attractive.

In reference to the causes that were concerned in reforming the sanitary affairs in the Crimea, the author says:—

"We may perhaps be expected to specify the causes, to which we attribute the happy change which took place in the sanitary state of the British army. First, then, the victualling became more easy, and the supplies more abundant; for this we have only to refer to what has already been said. Secondly, better arrangements were made with regard to hygienic measures. Here some further explanations may be necessary.

"Two questions naturally arise from this subject,—the first is, how better arrangements could exercise so great an influence on the sanitary state of the British army. This is easily explained. By draining the camp and carefully carrying off everything from which unwholesome emanations could arise, by providing a more healthy and convenient lodging for the soldier, by preventing the crowding together of the sick, and by the establishment of a good system of ventilation, all causes of evil were removed."

As Dr. Shrimpton is himself one of the very best authorities who has written upon the subject of special ventilation and special construction and management of fever-

wards, we appreciate his judgment upon the points above stated. The point also that he makes concerning the importance of having in every army a separate system or Bureau of Administration cannot fail to command attention. He concludes his remarks upon that subject by saying—

"When an army goes forth to war, the country should be assured that everything is provided for its success. Troops, that are not *always* prepared for war, are nothing better than an isolated band of soldiers. It is the Military Administration that makes them an effective army; this Military Administration should always, then, be prepared for war. Are not soldiers formed by discipline and exercise in time of peace? Should not the Military Administration be studied and perfected in all its branches in time of peace also?"

Certainly the importance of reforming the *administrative* service of armies cannot be too strongly urged, and as respects the Quartermaster's and Commissariat departments the French system is far better than the English or the American system; but it is a grievous fault in the French military service that the surgeon has *no rank*, and the Medical Department is made dependent upon the *Intendant* Department. M. Baudens bears testimony to the peculiar advantages that were enjoyed by the British medical officers in the Crimea during the last year of the campaign in consequence of the *military authority* which their system enabled them to exercise over the sanitary affairs of administration, etc.; and some of our readers will recollect an instance in which a French surgeon in charge of several hundred sick and wounded soldiers departing by transport from Civita Vecchia, bound to a French port forty-eight hours distant, ascertained to his consternation, on getting out upon the Mediterranean, that the *Intendant* in command of the company had not deemed it necessary to provide either subsistence or hospital supplies; and, as the medical officer had no military authority, the cruel and blind caprice of the *Intendant* forbade the ship to put into port for relief.

Dr. Shrimpton's record of Miss NIGHTINGALE's labors, her special qualifications for them, and the occasions that called them forth, conclusively show that in her were united the qualities, the functions, and, by force of her own will and the sanction of Lord Herbert, the *power*, which should endow the Sanitary Inspectors and Medical Directors of our own army.

Correspondence.

SOCIETY FOR THE RELIEF OF THE WIDOWS AND ORPHANS OF MEDICAL MEN.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—The article in your Journal of this date in regard to the N.Y. Society for the Relief of Widows and Orphans of Medical Men, seems to call for a few further remarks from me.

And first let me say, that as the TIMES is the only medium through which I can address the public in reply to its own editorials, you do the Society and me something less than justice when you suppress an important part of my first communication. I do not now allude to the closing sentences of my note, the withholding of which leads me to infer that you considered them personally sarcastic, though they were intended only as a bit of pleasantry. But I also stated in that note that the number of beneficiaries was increasing, and must be expected to increase hereafter in almost geometrical ratio. A knowledge of this fact was necessary to the formation of an intelligent judgment in regard to the action and policy of the Society.

I have spoken of the Society as a "charity." It ought rather to be regarded as a species of life insurance association, with a benevolent object. But unlike the ordinary life insurance companies, it does not exclude, but rather

seeks and welcomes to its membership and to prospective participation in its benefits, the infirm and the diseased. But in order that these benefits may be certain to come if needed, it is necessary that a large fund should be created; and it was the intention of the original founders, and is now, and has ever been the object of the Board of Managers, to accumulate such a fund. Unless that object were kept continually in view, there is no reason to doubt that the Society would soon fall into the condition of a similar one in this city, which, with more generosity than judgment, began by allowing to the destitute widows of its members \$800 per annum, and now is able to grant them only \$50. It is the policy we have all along pursued which enables us now to pay out to beneficiaries more than double the amount received from annual subscriptions.

The question is not, what portion of the present actual income of the Society is paid out to beneficiaries, but what proportion do those benefits bear to the amounts paid into the treasury of the Society, which have secured them. Not having at hand the statistics of the London society of the same name, which you have spoken of in comparison with ours, I am not able to contrast the two in this particular; but I may without impropriety state some facts in regard to our own.

The total amount paid into the treasury of the Society since its foundation, by and in behalf of those whose families are now receiving its benefits, is less than \$300, while the sums paid out to these beneficiaries are more than ten times that amount. It would not be proper to give names and particulars here, but I may mention that in one instance, where only \$40 were paid into the treasury by a member, his family have received already over \$2000 from the fund, and the allowance is still running on. There are other cases not less striking.

But let us compare the position of the London society with that of ours. The London society is over eighty years old. Ours is but little over twenty years. The London society depends in a very large measure upon contributions from persons out of the profession (hence it may more properly be regarded as a *charity*). Ours has received in all less than \$1000 from such persons. The London society finds it even now very difficult to meet the demands upon it, and has to make appeals to the public for aid. We have thus far had no occasion to make such appeals (though perhaps we might have to do it if we pursued the course which those who have not well considered the matter would indicate). The history of the London society in its early years is the same as ours, viz. at first no applicants; afterwards one or two; and then increasing in a ratio so rapid as to make it difficult to meet its wants, a condition which we hope to avoid. Lastly, the London society is only able at the present time, and after drawing for eighty odd years upon the benevolence of the community at large, to allow to the widows of its members the sum of £40 per annum, exactly 25 per cent. more than we allow after existing one fourth of the time, and receiving contributions to its funds (with the small exception I have named, a considerable portion of which came from one man) from the profession alone.

I might go into this matter in greater detail, and bring forward other arguments, but I think what I have said will be sufficient to convince almost any one that the Society is pursuing a wise and judicious course. I will therefore only give one or two additional facts. Already the deaths among members of our Society have reached about 18 per cent. of its membership. *One-sixth* of these, or nearly 17 per cent., have required and received aid from its funds. Moreover, there has been, so far as is known, no instance of actual penury; but in several instances where, for a time, there was an urgent need, the case has been met by special appropriations from the funds, in addition to the annual allowance.

Yours, etc., S. CONANT FOSTER, M.D.,
Secretary of the Society.

24 EAST 21ST STREET, NEW YORK, January 23, 1864.

NEW YORK STATE MEDICAL SOCIETY, FIFTY-SEVENTH SESSION.

[*Special Correspondence.*]

THE 57th Session of the New York State Medical Society, organized this morning (Tuesday, Feb. 2), at eleven o'clock, in the Supervisors' room of the City Hall. DR. DANIEL P. BISSELL, of Utica, President, in the chair. The session was opened with prayer by the REV. DR. WYCKOFF. After which the President delivered in a brief and very appropriate manner, his Inaugural Address. Among the important points suggested in this address were, that hereafter two Vice-Presidents be chosen, and that, in view of the onerous duties attached to the position of Secretary of this Society, a salary be connected with his office.

The President then proceeded to appoint the following Committee on Credentials, viz. DRS. HOWARD TOWNSEND, N. C. HUSTED, S. D. WILLARD.

On motion of DR. B. R. STAATS, the President's Inaugural Address was referred to a select committee of three, viz. DRS. STAATS, BLATCHFORD, and DOOLITTLE.

DR. J. V. COBB, of Oneida, offered the following resolution:

Resolved, That the Chair appoint a committee of three to extend an invitation to such members of the Legislature as belong to the Medical Profession, to attend the meetings of this Society during its present session.

The chair appointed as such committee, DRS. COBB, SAUNDERS, and CORLIS.

DR. COBB announced the death of Dr. A. BLAIR, and presented a memoir.

DR. HASBROUCK, of Rockland, presented the Annual Address delivered before the Rockland County Medical Society, which was referred to the publishing committee.

DR. FURMAN, of New York, presented the following communications from the Medical Society of the County of New York:

1st. A paper on the True Indications for the Employment of Stimulants in Continued Fevers, by HANBURY SMITH, M.D.

2d. A paper by JAS. L. BROWN, M.D., on the Action of Mercury upon the Liver, with a report thereon, by the Committee on Intelligence of the above mentioned Society. Said Committee consisting of DRS. CHAS. HENCHEL, *Chairman*; JOHN G. ADAMS, A. S. PURDY, JOS. L. CRANE; J. KING MERRITT, *Secretary*.

3rd. A review, by ALONZO CALKINS, M.D., entitled "Judicial Executions for Capital Crimes; their History, Offensive Features, and their Corrective," with suggestions to the profession.

4th. A paper on the Therapeutical Properties of the "Chloride of Ammonium," commonly called the Muriate of Ammonia, by J. R. LEAMING, M.D.

5th. A paper on Spinal Irritation, or the Causes which tend to produce Back-Aches in American Women, by C. F. TAYLOR, M.D.

6th. "Remarks on the Surgical Management of Membranous Croup," by LEWIS A. SAYRE, M.D.

7th. An Annual Report from the Society's Committee on Diseases. Said Committee, consisting of DRS. H. D. BULKLEY, *Chairman*; E. R. PEASLEE, D. S. CONANT, J. P. GARRISH; and WM. H. THOMSON, *Secretary*.

8th. An Annual Report from the Society's Committee on Meteorology; The Committee consisting of DRS. J. P. LOINES, *Chairman*; BENJ. DRAKE, WM. F. THOMAS.

These communications were accepted, and referred to the publishing committee.

DR. SQUIBB presented a communication from the Kings Co. Medical Society, on "Disinfectants," by A. N. BELL, M.D.

The President introduced DR. WM. McCULLUM, of the Vermont State Med. Soc., and DR. S. W. BUTLER, from Philadelphia. Both gentlemen acknowledged the honor. DR. BUTLER remarked that last week he had the pleasure of being present at the Med. Soc. of New Jersey, and spoke in flattering terms of its "liveliness," but added that the present assemblage excelled the former.

DR. SQUIBB presented a report from the Committee "On Revision of the U. S. Pharmacopœia." DR. SQUIBB was requested to read, at a suitable time, such portions of the report as he might select, which would not exceed fifteen minutes in reading.

The Committee on the Merit Cash Prize Essay, reported that they have received three papers on the subject presented, namely, "How complete is the Protection of Vaccination, and what are the dangers of Communicating other Diseases with the Vaccinia?" They have read them all carefully, and while each contains much that is valuable, the one marked 101 is considered a very superior paper, and its circulation calculated to do good. The Committee are unanimous in recommending that paper for the prize. Agreeably to the suggestion of the Secretary, and after consultation with other members of the Society, the Committee have consented to present in their report a competitive subject for the coming year, hoping that its early announcement will secure a wider competition. The subject chosen is the following: "The Pathology and Treatment of Chronic Diarrhœa, contracted in Camps and Malarious Regions," illustrated by cases; competitors must be citizens of this State, and they are required to hand in to either member of the Committee their essays by the 15th of Dec., 1864, at latest, and as much earlier as convenient, that sufficient time may be given for examination and consultation.

The report was accepted, and the Secretary broke the seal, and announced DR. A. N. BELL, of Brooklyn, as the successful essayist.

It was then resolved to append to the essay of DR. BELL the paper on vaccination, published by the U. S. Sanitary Commission.

The Secretary presented invitations from DR. MARCH, for this evening, and one from DR. QUACKENBOS, for Wednesday evening, to a social gathering at their residences, which were unanimously accepted.

The President then announced the Committee on Nominations as follows:—1st District, EDWARD R. SQUIBB; 2d District, E. H. PARKER; 3d District, ALDEN MARCH; 4th District, E. HOWARD; 5th District, J. V. COBB; 6th District, J. G. ORTON; 7th District, no representative; 8th District, J. T. WILLIAMS.

DR. E. S. LYMAN presented a communication from the Medical Society of Chenango.

DR. PERCY gave an abstract of a paper prepared by him for the society, on "The Food of Cities." The matter principally brought before the society was the diseased condition and innutritious qualities of the milk and meats, from animals fed at the distillery dairies. He gave many instances of disease produced in individuals by this milk, and cases of immediate sickness from swill-fed beef. He also mentioned cases of malignant pustule, and evident invasion of *Trichina spiralis* in swill-fed beef. The remarks made by him brought out several other members, giving their experience on this subject.

On motion, it was resolved,

That a Committee of Three be appointed by this Society, to request the State Legislature to appoint a committee, to meet with them, and devise some law that will completely put a stop to the sale of swill milk.

The President appointed DRs. PERCY of New York, WHITNEY of Queens, WILLIAMS of Chautauque County.

DR. SAYRE, of New York, made some remarks upon the surgical management of membranous croup, chiefly advocating a change of position in the fenestra of the tracheal tube, and that the same should be limited to the external tube only. Also advised that such patients should breathe constantly a moist atmosphere, of a high and uniform degree, with a view to dissolve the accumulated exudation.

DR. TOWLER read a paper entitled "An Analysis of Blood Stains a Means of detecting Crime," of which the following is an abstract. He observed that the paper was simply the report of an investigation of certain blood-stains found on the pantaloons of a certain Scaman Simons, accused of the murder of one Van Gelden. The prisoner

had asserted that the blood-stains had been caused by the blood of an ox which had exuded from the ox's nose by the irritation of an iron ring that had been forcibly removed from this organ.

The first part of the analysis consisted in obtaining from the cloth a red dust, by disintegrating the cloth.

The second part was to prove this red dust to be that of dried blood, which he did as follows:—

1st. A solution of these red particles was red.

2d. This solution had an alkaline reaction.

3d. When boiled a reddish-grey coagulum was formed.

4th. The coagulum was soluble in caustic potash. The resulting solution had a greenish hue when viewed by reflected light, and a reddish hue when viewed by transmitted light.

5th. A small portion of the powder was dissolved in pure hydrochloric acid, and then tested with sulphocyanide of potassium, which produced a deep red stain indicating iron; but hæmatin contains iron.

DR. T. observed that all these tests were so many links in the chain that lead to the conviction that the red powder was blood.

He concluded, too, from certain appearances in the cloth, that the blood must have been arterial blood.

Making use of Schmid's table, in which this author exhibits the average size of the diameters of the blood-corpuscles of various mammalia, as also the maximum and minimum sizes of said diameters, Dr. Towler showed, by drawings taken directly from the restored blood discs of the woollen cloth, as compared with the drawings of an ox's blood-corpuscles, in which there was an apparent ratio of four to three nearly, that the blood-discs obtained from the dried blood could not possibly be those of an ox. He informed the Society that the prisoner had been found guilty of murder in the first degree; and that since the announcement of the verdict the murderer had acknowledged his guilt, and furthermore, that the blood-stains were those of a human being.

DR. BATES presented a memoir of the late Dr. Robert G. Frary.

Adjourned to meet at 3.15 P.M. this afternoon.

(To be Continued.)

NEW JERSEY STATE MEDICAL SOCIETY.

(Special Correspondence.)

THE 98th Annual Meeting of the New Jersey State Medical Society was held at Camden, on Tuesday and Wednesday the 26th and 27th of January. There was a large representation of the profession of the State. DR. VARICK, of Jersey City, occupied the chair, and, as president, delivered the opening address. His subject was "Mental Conditions as affecting the Treatment of Disease." In a concise and interesting manner he traced the various relations of psychological and physiological phenomena. A copy was requested for publication.

DR. CONDIER addressed the members on the importance of their favoring the establishment of a Hospital for Inebriates in this State, and interested the society much in this respect. A committee was appointed to urge upon the state authorities attention to the matter.

The morning session was opened with prayer by the REV. DR. GARRETSON. After the usual preliminary business the scientific essay was read by DR. ABRAHAM COLES, of Newark; the subject was "Hospital Gangrene." It was an able presentation of the whole theory and practice in reference to the disease. Not assuming to settle questions which have always puzzled careful observers, it plainly declared the clearest indications as to treatment. In purity of style and conciseness of reasoning, as well as in the well arranged accumulated facts, it was a model paper.

The report of the standing committee was read by DR. WEEKES, its efficient chairman. It was an admirable, well condensed statement of the various medical facts and statistics afforded by the reporters of the district societies, Nine

or ten of the members of the profession in this state have died during the past year. A brief notice of each is appended to the report. Diphtheria, fever, measles, and whooping-cough are designated as the most prevalent diseases of the year; malarial influences have been more impressive than usual, and miasmatic diseases have occurred in many localities. We must refer for the valuable accumulation of interesting medical information to the printed report, which will be found well worthy of a careful perusal. A case of monstrosity, consisting of two male children united from scapula to pelvis, was referred to in the report; and the specimen exhibited by Dr. Tomlinson, of Shiloh, in whose practice it occurred.

The general essay, by DR. CULLEN, of Camden, treated of the "Medical Profession as affected by the War." It reviewed the conduct of certain high medical officials towards Dr. SWINBURN, of Albany, N. Y., in the case of Colonel —, and expressed fears that the ethics of the profession would suffer from the training to which medical men become accustomed in the camp. Many of the points made by DR. CULLEN were well presented, and a word to the wise ought to be sufficient. We believe the civil and military surgeons will still feel themselves brethren, and that the latter will not, on their return to private medical life, attempt any display of medico-military tactics.

The Medical Society of New York State was represented by one of its most honored members—DR. BLATHEFORD, of Troy; and that of Pennsylvania by Dr. THOMAS. A special hour was set apart for hearing delegates, and each of them favored the society with a brief and felicitous address. They were responded to by the President on behalf of the Society. A pleasant letter of regret for unavoidable absence was received from the Connecticut delegates, and a continuance of correspondence requested.

A free discussion was held among the members as to various methods of promoting the increasing interest and efficiency of this venerable organization.

The election of officers for the ensuing year resulted as follows:—

President, DR. EZRA M. HUNT, of Middlesex Co.

1st Vice-President, DR. ABRAHAM COLES, of Essex Co.

2d " DR. B. R. BATEMAN, of Cumberland.

3d " DR. D. JOHNSON, of Warren.

Corresponding Secretary, DR. T. J. CORSON, of Mercer.

Recording Secretary, DR. WM. PIERSON, of Essex.

Treasurer, DR. J. S. ENGLISH, of Monmouth.

Chairman of Standing Committee, DR. S. WICKES, of Essex.

The usual number of delegates was appointed to the American Medical Association and to the various Societies in correspondence. DR. BLAIN made the report in behalf of the delegates last year to Chicago; and reports were also received from the Delegates of New York, Pennsylvania, Connecticut, and Massachusetts. After the transaction of various other items of business, the society adjourned to dine together at English's Hotel.

The delightful weather, the pleasant entertainment, the provisions made by the committee of arrangements, the scientific and practical interest manifested, the warm interchange of professional and personal friendship, all united to render this one of the most agreeable anniversaries of the Society.

The next meeting is to be held at Burlington on the 4th Tuesday in January, 1865. M.

WE are informed that Dr. J. Parigot has collected a large amount of information relative to the Insane Asylums of the West during his recent tour, which he intends giving to the profession and the public in a course of Lectures before the Medical Colleges in Cincinnati and St. Louis. We hope arrangements will be made by which he will repeat the Lectures before the Academy of Medicine of this city.

Army Medical Intelligence.

HEADQUARTERS FORT SCHUYLER,
January 24, 1864.

Copy.

SPECIAL ORDERS, No. 21.

Acting Assistant-Surgeon Frank H. Hamilton, Jr., having reported for duty, will take charge of the hospital at McDougall Barracks, and will immediately fit it up for the occupancy of the sick.

By order of Brevet Brigadier-General Brown,
E. C. WOODRUFF,
1st Lieut. 7th U.S.I.,
Post-Adjutant.

ORDERS, CHANGES, &c.

So much of Special Orders No. 5, of January 5, 1864, from the War Department, as directed Surgeon C. L. Allen, U.S.V., to report to the Commanding General Army of the Potomac, is revoked, and he will report in person without delay to the Commanding General, Army of the South, for assignment to duty.

Surgeon A. Crispell, U.S.V., is relieved from duty in the Department of the South, and will report in person without delay for duty to Major-General Dix, U.S.V., commanding Department of the East.

Surgeon M. K. Hogan, U.S.V., will report in person without delay to Surgeon Thomas Antisell, U.S.V., President of the Army Medical Board, now in session in Washington, D. C., for duty as a member of that Board, and to Surgeon R. O. Abbott, U.S.A., for duty attending sick and wounded officers in Washington, D. C.

Surgeon Josiah Curtis, U.S.V., is relieved from duty in the Department of the Susquehanna, and will report in person without delay to Assistant Surgeon-General Wood, at Louisville, Ky., "for duty in the field."

The McDougall Hospital at Fort Schuyler, N. Y., has been turned over to the Quartermaster's Department.

The following assignments of Medical Officers have been made:—

Surgeon Henry Buckmaster, U.S.V., now on duty as member of the Army Medical Board in session at St. Louis, Mo., to report to the Major-General Commanding Department of Kansas, for duty as Medical Director of that Department.

Assistant Surgeon J. S. Smith, U.S.A., now in charge of David's Island General Hospital, New York Harbor, to be relieved from duty in the Department of the East, and to report to the Commanding General, Army of the Potomac.

Assistant Surgeon T. H. Helsbey, U.S.A., to be relieved from duty in the Army of the Potomac, and to report to the General Commanding the 8th Army Corps, for duty in the Middle Department.

Surgeon Burkitt Cloak, U.S.V., is relieved from duty at Camp Dennison, Cincinnati, Ohio, and will report in person without delay to Assistant Surgeon-General Wood, U.S.A., at Louisville, Ky., for assignment to duty.

The following named Hospital Stewards are relieved from duty in Washington, and will report in person without delay for duty to Surgeon Ebenezer Swift, U.S.A., Medical Director, Department of the South: John Cross, G. W. Cummings, W. H. Bricker. The Quartermaster's Department will furnish the necessary transportation.

Surgeon Enoch Pearce, U.S.V., now in Hospital at Cincinnati, Ohio, will report in person without delay to Assistant Surgeon-General R. C. Wood, U.S.A., at Louisville, Ky., for assignment to duty.

Surgeon J. B. Porter, U.S.A. (retired), is relieved from duty at Chicago, Illinois.

The proceedings, findings, and sentence of the General Court Martial, convened by virtue of Special Orders No. 160, Headquarters Military District of Washington, July 11, 1863, in the case of Surgeon William H. Thayer, 14th New Hampshire Vols., are disapproved, and he is dismissed the service of the United States, to date from January 8, 1864.

So much of Special Orders No. 399, September 5, 1863, as dismissed Assistant-Surgeon James Moore, 17th Pennsylvania Cavalry, is revoked, he having been previously discharged, upon tender of resignation, by Special Orders No. 107, series of 1863, from Cavalry Corps, Army of the Potomac.

At the request of the Governor of Massachusetts, Assistant-Surgeon William Thorndike, 34th Massachusetts Vols., is honorably discharged the service of the United States, to enable him to accept an appointment as Surgeon of the 39th Massachusetts Vols.

The resignation of Surgeon R. Cresson Stiles, U.S.V., has been accepted by the President, to take effect January 16, 1864.

Surgeon William C. Bennett, U.S.V., is performing the duties of Medical Director of the 12th Army Corps, during the illness of Surgeon John McNulty, U.S.V.

Surgeon Henry Jones, U.S.V., is on leave at Waterbury, Vt.

Assistant-Surgeon Henry Eversman, U.S.V., is on duty in the Office of the Medical Director, Louisville, Ky.

Surgeon W. S. Thompson, U.S.V., has accompanied the 16th Regiment Invalid Corps, from Harrisburg, Pa., to Elmira, N. Y.

Surgeon J. H. Baxter, U.S.V., is on duty as Chief Medical Officer, Provost Marshal-General's Office, Washington, D. C.

Surgeon E. B. Dalton, U.S.V., has returned from leave of absence, and resumed his duties as Surgeon-in-charge, Balfour Hospital, Portsmouth, Va.

General Hospital No. 5, Nashville, Tenn., has been closed. In consequence of the want of fuel at Nashville, all the patients whose condition warranted it, have been sent North for the winter.

Surgeon S. S. Mulford, U.S.V., is on leave of absence in New York city.

Surgeon R. R. Taylor, U.S.V., is on leave of absence (sick) at Philadelphia, Pa.

Original Lectures.

LECTURES ON GUNSHOT INJURIES OF THE HEAD.

By FRANK H. HAMILTON, M.D.,

PROF. OF MILITARY SURGERY AND FRACTURES AT BELLEVUE HOSP. MED. COLLEGE, AND LONG ISLAND COLLEGE HOSPITAL; SURGEON TO BELLEVUE HOSPITAL; LATE MEDICAL INSPECTOR, U.S.A.

LECTURE I—PART II.

THE phenomena attending concussion, compression, and inflammation of the brain have already been indicated to you in a previous lecture; and I will now proceed at once to a more precise consideration of gunshot injuries of the head.

First, I would remark that you may have an injury of the scalp of an exceedingly trivial character, which may in the end prove fatal. A ball may simply tear off the hair of the scalp, and create a very slight abrasion of the skin, yet the bone being so near, and the brain so close to the bone, it is very probable that serious mischief has been done. The bone in that situation may be so injured as to lead to necrosis, or a sufficient shock may be given to the brain and its envelopes to bring on inflammation. I will mention a very remarkable illustration of this fact. Colonel Farnham, after the death of Colonel Ellsworth, took command of the 1st Zouave Regiment. At the battle of Bull Run, July 21, 1861, he received an injury of the character referred to, and which I examined myself. It was a very slight and superficial wound, which seemed to have taken off very little more than the hair. He was transferred from the field to the Washington Infirmary, where he was reported as doing very well, the wound being considered as a very slight and insignificant one, but, notwithstanding all this, he kept his bed. He did actually seem to be improving until about the ninth day after the reception of the wound, when grave symptoms suddenly supervened, and in a day or two after he died. I should notice that during all the time he was in the hospital he was very easily disturbed by visitors, and it was his desire to be left alone, showing that there was some cerebral disturbance. I ought also to mention that he was ill before he received the wound, and was unfit to perform duty at the time the battle took place, but being a gallant officer he was determined to lead his regiment to the charge; but his previous condition I do not think had much if anything to do with his death, which, in my opinion and in the opinion of many other surgeons who saw him, was due directly to the apparently slight wound which he received during the fight.

You will find a good many similar cases related, some in which death has taken place after a few days, and others in which nothing of the sort being at first apprehended, the external table has eventually become necrosed and exfoliated. The bone has been concussed simply, and necrosis has been the result. And, indeed, there are some cases related in which this has occurred where there has been no external wound at all, the passage of a large shot across the skull impinging sufficiently to produce a temporary concussion of the bone. I mention this that you may not regard these slight injuries as insignificant. If you see the track of a ball upon the scalp you may safely infer that the brain has received some concussion, and it is your duty to watch over your patient carefully, and be prepared for serious trouble.

Pursuing this analysis of the subject, I will next call your attention to those examples in which the ball has passed under the scalp. A round ball impinging upon the scalp somewhat obliquely, is very likely to pass under the skin and along for a considerable distance. I have seen two marked examples of this. One during the first battle of Bull Run, in which a man received a ball behind the

mastoid process, and it was found above and in front of his ear. When I first examined the case my suspicion was that the ball had actually entered the head, but on examining the case carefully I detected a swelling in front of the ear, and discovered that the ball was lodged there. It was easily removed by a counter-opening. In another case the ball had entered above the ear, and passed backwards, and was found lying under the skin at the back of the neck, from which point I removed it by a counter-opening. Both of these balls were very much flattened. I never saw either of the men afterwards, and cannot state the result, but I think it very probable that some exfoliation of bone took place.

Such examples are not unfrequent. I should notice that if you find a hole in a man's scalp, and he is alive and not insensible, you are pretty safe in assuming that the ball is somewhere underneath the skin. When you find it, all that is required for its removal is a counter-opening; this method of procedure, the cut being necessarily a superficial one, is much to be preferred to the extraction of the missile through the original wound. But you will observe that you are still quite certain to have necrosis of the bone, at least of the outer plate. I have seen frequent examples of necrosis from such a cause. The patient will say that the surgeon cut the ball out, and that, after a few weeks, suppuration took place, and that sequestra were in due time exfoliated. The cure may be very tedious, but if the patient be treated properly, if he is kept free from all excitement, and his bowels kept soluble, he will get well.

Next you may have the ball entering and breaking the skull, but not absolutely passing through the bony wall. These are, however, not so frequent as the first class of accidents. If the skull yields at all you will find that now and then the ball has entered just sufficient to produce a slight depression; sometimes it imbeds itself, but it is more likely to bound back. In these cases you have the signs of concussion more marked, the patient generally being unconscious for a greater length of time. If he comes under your observation some time afterwards, you will probably find that he has suffered a good deal from more or less paralysis of the opposite side of the body, that he has had more or less coma, but especially that he has had convulsions. If you see this case immediately after the occurrence, the question arises at once, whether you shall trephine. I bring you to this point at once because there is nothing else that you can think of doing.

All that I can say about such examples is this: if the depression is slight, and there are no signs of irritation or of compression of the brain, if you have reasons to believe there are no spiculae of bone projecting into the brain, then do not trephine; the patient's chances of recovery are better if you let him alone, than if you proceed to operate.

The difference between this accident and similar injuries occurring in civil practice, where in most cases the fracture has been caused by other substances than bullets, is very great.

This poor man lying in the hospital to whom I have already referred, has been injured by the fall of a load of wood upon him. Now, imagine the difference of effect which such an injury would produce upon the brain compared with that which a bullet would inflict. The ball, even when its velocity is nearly expended, impinges upon the skull with a dead and solid weight. Hence you can easily understand how, when the external evidences of injury are comparatively slight, the brain may be seriously compromised. When a piece of wood has fallen upon the head, although the aggregate weight of the mass may be very disproportionately great, the momentum is comparatively inconsiderable.

The danger from gunshot injuries of the skull is not so much due to depression of the skull as to concussion of the brain, and it is observed that in trephining you will cause sufficient additional injury to turn the balance in the scale against recovery. The proper local treatment, then, consists in applying cloths wet in cold water to the head;

while the constitutional treatment consists in placing the patient in a hospital, in keeping him on a low diet, keeping his bowels open, and perhaps bleeding him. I believe, gentlemen, that venesection is very much underrated, and that in these affections, of the brain especially, we do not sufficiently understand its value, more especially in patients of full habit. It is true that we cannot deplete the brain as much as one would at first suppose, but still we can accomplish a great deal of good by diminishing the force of the heart. The brain is peculiarly situated in a firm, bony, and unyielding casement, and by the laws of hydrostatics we cannot expect much blood to be drawn from it; when you bleed the lungs or liver, the envelopes of those organs contract upon the blood-vessels; in the case of the brain this cannot occur, you can only rarify the blood within the brain.

Venesection, I think, should be practised in a pretty large proportion of these cases; but more important than all this, are, I think, the cathartic medicines; it not only serves to increase the drain upon the system, but creates an irritation over an immense extent of surface. The patient, too, should be kept upon the smallest amount of nourishment which will supply his wants; in other words, he should be restricted to a low diet. All these things are necessary, and must not be omitted, if you wish to give to your patient the best chances for recovery.

Original Communications.

EPILEPSY OF THE RETINA, AND ITS CONNEXION WITH GLAUCOMA.

By JULIUS HOMBERGER, M.D.

(Continued from page 54.)

THE study of the theory of Donders on glaucoma simplex directed my attention again to these attacks. I had almost accustomed myself to consider them as the first symptoms of glaucomatous disease, though neither touch nor ophthalmoscope revealed any of the symptoms of intra-ocular pressure. I was justified in this supposition, for I found in Donders' remarks on glaucoma simplex for the first time a description of total blindness of short duration, with complete return of vision, and without a symptom of inflammatory or congestive action. I could not find a more suitable explanation for my past troubles, and for want of one I considered myself glaucomatous, or on the way to become so.

J. Hughlings Jackson's striking term of "epilepsy of the optic nerves" reminded me of my hypochondriacal misgivings; and even before I had read the above related case of Julia W.—, I construed my case into one of epilepsy of the retina, a construction in which the description of J. W.'s retinal epilepsy has since confirmed me.

This is the origin of a chain of speculations, in which I have indulged since Jackson's article came to my knowledge. After some deliberation, the idea presented itself that the typical form of glaucoma (glaucoma simplex) might be etiologically related to epilepsy. It may be assumed that the same effects are produced by the same causes that the emptiness of the cerebral vessels and of the optic nerves depends on the same nervous derangements, it having been demonstrated by Jackson's experiments, that the eyeground is relatively bloodless (and arterial pulsation developed?) in epilepsy, as it already was known to be in glaucoma simplex. The case of Ischæmia Retinæ, described by Alfred Graefe in the Archives of Ophthalmology, confirmed me in the explanation presented. It is reported in the *American Journal of Ophthalmology*, vol. i., p. 32.

"A child 5½ years of age was brought to Dr. Graefe for total, suddenly produced, blindness. The child had been always perfectly well before. A pale color of the face, large pupils, had caused the father, who is a surgeon, to use

anthelmintics, and several times ascarides had been thrown out. The patient had, except this, never suffered from cramps, hæmorrhages, or headache.

A week before she was brought to Dr. Graefe's Clinic, she went perfectly well to bed, and the following morning, when she wanted to get up, her mother noticed the blindness. She could not, on that morning already, distinguish light from dark.

On the day of her presentation, there was the following *status præsens*: Eyes wide open, aimlessly wandering, as in amaurosis; color of face and skin pale; the mucous membranes exceedingly pale. All functions regular. The pulse very small; frequency one hundred and sixty. No sign of inflammatory action in any part of the eyes; conjunctiva very pale; pupils large, without any reaction on light. Moderate contraction of the pupil by instillation of tincture of opium (irritation of the superficial ramifications of the trigeminus) and very slight augmentation of the dilatation by atropine. No symptoms of an augmentation of intra-ocular pressure.

Ophthalmoscopic Examination.—Refracting media perfectly clear. The principal branches and ramifications of the arteria centralis retinæ thin, as capillary vessels. Veins of the retina uncommonly serpentine; comparatively much, but not uniformly, filled. The limits of the papillæ nervi optici appeared indistinctly marked; otherwise normal. The chorioidea normal.

There was no sign of quantitative perception of light.

The pulse showed a frequency of 124 on an average. The heart was normal. Digitalis, used during two days, had no influence on the pulse. Bleeding near the temples, suppurating blisters in the neck, irritating foot-bath, large doses of calomel, and the application of Heurteloup's artificial leech, did not produce any changes in the condition of the disturbed functions.

The supposition of an intra-cranial process was least justified, the author says, in his remarks on the case, which enter fortunately in every detail, so that every detail may be appreciated. If there had been an inter-cranial disease, it would have been impossible to explain the sudden attack of blindness, as the result of paralysis of the optical nerves, without the presence of any other symptom, indicating a disease of the brain. An apoplexy, the rupture of a cyst or an abscess, seemed improbable, or rather impossible, for the same reasons: the isolation of the symptoms.

There seemed no doubt the cause was a disturbance of circulation. In favor of this hypothesis was the suddenness of the attack, the local nature of the affection, and the enormous difference in the injection of the retinal vessels.

The supposition of an embolus had to be given up, on account of the bilaterality of the affection. The embolus would have to be looked after in the next principal artery, common to both the art. centrales retinæ, i. e., the arcus aortæ, or it would have been necessary to suppose that embolic impediments had simultaneously become localized in the a. centrales retinæ or a. ophthalmicæ. The improbability of the first case is clear enough; the second supposition would be absurd, as no disease had existed which would give a disposition to embolus of the arteries.

Just as little probable is the hypothesis of a hydrocephalus internus and a pressure, exerted by it on the basis cranii, bilaterally near the ductus arteriosus Willisii, consequent to which the retinal arteries should have lost their permeability. Exudations and neoplasms are not likely to produce these symptoms; the reasons why are already contained in the preceding.

Even if the permeability of the arteries had been based on such a cause, the pressure would have acted on the art. ophthalmicæ; but then the circulation of the chorioidea would necessarily have suffered as much as that of the retina, while the ophthalmoscope showed a normal circulation in the choroid. The author does not go on to extend this well defined diagnosis by exclusion, to all those causes which might be possibly drawn into consideration; he is convinced that local conditions in the eyes have been the

motives of such an interference in the circulation of the arterial blood; thus the functions of the retinæ had been destroyed.

The nature of the impediment was not known to the author, but he was firmly satisfied that, as already stated, the disease was local and isolated.

Ten days the patient had been without quantitative sensation of light. The author resolved to try to remedy the arterial anæmia of the retina by lessening the tension of the globe, to produce a stronger injection of the vessels *ex vacuo*.

The 19th of December a large iridectomy (upwards) was executed on the right side; on the left, a paracentesis of the anterior chamber.

Twenty hours after this, the anterior chambers of both the eyes were normally filled; the pupils were decidedly sensible to light. *The little patient distinguished very well day and night, and followed even the movements of the hand, with good fixation.*

It was further found that the vision had only returned on the eye where the iridectomy had been made, and that the movement of the pupil of the left was merely sympathetic. The following day, the child counted fingers at a distance of two feet, and the field of vision seemed entirely or almost free. The left eye was yet totally amaurotic. Iridectomy was performed on it the same day, and the perception of light had returned, when the bandage was removed—just as in the other.

The fifteenth day after the operation on the second eye, the child could distinguish the number of very small points, $\frac{1}{2}$ mm. distant from each other. The field of vision was normal. The ophthalmoscope showed, when first used the third day after the operation on the second eye, the arteries of normal size. There seemed only to exist yet some irregularity in the injection of the veins. The case (interesting in itself) became, we think, a triumph of science, by the splendid success of the operation. We believe, with the author, that it would be superfluous to extend scepticism, so far as to speak of a spontaneous cure, coinciding with the operations.

The success, remarks the author, proves that I was right to exclude intra-cranial disease and extra-cranial stopping of circulation. There were certain local conditions, which were the cause of the blindness. In glaucoma, the diminution of intra-ocular pressure effected by iridectomy has been much more palpable as the effect of paracentesis. The causes of the influence of iridectomy on the intra-ocular pressure *are not yet perfectly explained*, but this cannot be a weighty objection to the existence of undeniable facts. The negative effect of paracentesis is attributable to the difference of intensity of action of the two modes of procedure.

It seems evident that the iridectomies performed in this case effected a diminution of intra-ocular pressure, as in glaucoma; that by the production of a relative vacuum, a stronger injection of the arteries was effected, and that so the ophthalmoscopic appearance of an ischæmia retinæ, as well as the consecutive functional disturbances, were brought back to a regressive stage.

The next question is, how such an abnormal condition in the filling of the arteries could be produced, as there were no symptoms of an augmentation of intra-ocular pressure?

The author thinks that this misproportion between intra-ocular pressure and 'lateral pressure'* of the a. centralis retinæ may be produced in a double way. The changes of circulation in *glaucoma* are the consequence of a misproportion between intra-ocular and lateral pressure. It would be difficult to decide whether the quick destruction of sight in glaucoma depends more on the direct pressure on the nervous elements of the retina, or on a disturbance of circulation in the a. centralis, in consequence of the augmented intra-ocular pressure. While in cases of augmented intra-

ocular pressure the circulation of the artery is diminished by the action of the pressure on the entrance of the central artery of the retina, a similar misproportion ensues when *the lateral pressure in the artery is diminished, although the intra-ocular pressure is normal.*

The cause of the frequency of the pulse could not be found. The paleness of the face and mucous membranes allows the diagnosis of a certain degree of anæmia. The hypothesis of the existence of local anæmia in the arteries of the eyes is therefore justified. The disturbance of the function of the retina has to be attributed to the relative misproportion between the (normal) intra-ocular pressure and the (diminished) lateral pressure in the central artery.

To ascribe the frequency of the pulse to the existence of helminthiasis and irritation of the sympathetic nerve would not clear up the case much. More important is the fact proved often, and lately by Einbrodt,* that the lateral pressure in the arteries is greatly diminished with an augmented frequency of the action of the heart. The arterial blood of the retina is solely provided by the central artery, the angular entrance of which in the interior of the eye seems to be favorable to disturbance of the circulation, while on the other hand, no anastomotic collateral circulation is possible.

It might be possible that the contraction of the walls of the artery by irritation of the vaso-motoric nerves, through the sympathicus,† was the cause of the local anæmia, though various reasons do not make this supposition very probable.

Three months after the operation, the eyesight of the child was absolutely normal."

Dr. Graefe would, I think, not have attributed this case of blindness to a local disturbance of circulation only, but certainly have brought it in relationship with Donders' type of glaucoma simplex, had the scientific world then (1862) been acquainted with the results of the labors of the Dutch ophthalmologist. Nothing is more justified than now to consider this case of "ischæmia retinæ"‡ as one of "glaucoma simplex" unattended by inflammation, in which some of the symptoms of intra-ocular pressure (*f. i.* excavation of the optic nerve) had not yet been developed, or better to consider the case as an attack of retinal epilepsy.

CASE OF STRANGULATED FEMORAL HERNIA

IN WHICH THE STRICTURE WAS DIVIDED EXTERNAL
TO THE SAC, RESULTING IN
INTESTINAL FISTULA.

A SECOND CASE,

IN WHICH THE INTESTINE WAS FOUND TO BE GANGRENOUS;
RESULT FATAL.

By JAMES L. LITTLE, M.D.,

OF NEW YORK.

ON May 18th, I was called to see Mrs. L——, in 51st street, in consultation with Dr. Church, her attending physician. The patient was a delicate-looking woman, forty-seven years of age, married, and had children. She had for the past ten years been subject to a femoral hernia of the right side, for which she had never worn a truss. On May 14th the hernia became strangulated, attended by the ordinary symptoms—pain, vomiting, and constipation. She refused to call in a physician until the evening of the 17th, when she sent for Dr. Church. He made an unsuccessful attempt to reduce the hernia by taxis while she was under the influence of chloroform, and advised an operation.

* Untersuchungen zur Naturlehre, her. v. Moleschott. 1859. Vol. vii.
† Experiments of Bernard and Brown-Séquard. Schmidt's Jahrbücher, Bd. 104.

‡ Thus the disease has been called by Dr. Graefe. The word "ischæmia" (*ἰσχαμία*) means a local or partial anæmia, and was introduced by Virchow, (*Pathologie*, Vol. I.) He wanted "to dispense with the usual expressions, Anæmia, Oligæmia and Spanæmia," as these were used to express both general and local disturbances.

* The pressure which the blood exerts on the walls of the arteries. This pressure is the expression of the force by which the blood is driven into the artery by the heart.

Her condition at the time of my visit was as follows:—Pain in the right groin, and in the region of the umbilicus; constant vomiting and constipation. On inspection, a slight swelling could be seen in the right groin, and, on manipulation, a tumor, tender on pressure, about the size of a hen's egg, could be felt just below and to the inner side of Poupart's ligament, and a smaller tumor situated above the ligament. This last, she stated, had existed for about a year, and during that time had been irreducible. The larger tumor was slightly resonant on percussion.

Without any further attempt at taxis, patient was etherized, and, assisted by Drs. Church, Campbell, and J. L. Smith, I proceeded to operate.

Operation.—An incision about four inches long was made in a line parallel to, and nearly over Poupart's ligament. A second incision was then made, commencing from the middle of the last, directly downwards, a little to the inner side of the tumor, for about three inches, thus forming a T incision. The different layers of tissues were then carefully divided over a director, until the sac was exposed, and the finger could be carried up to the femoral ring, and Gimbernat's ligament could be felt. A hernia knife was then introduced, and directing the edge of the instrument upwards and inwards, the fibres of the ligament were divided. Slight manipulation over the tumor caused it to recede, leaving behind a thickened sac, a portion of which extended above Poupart's ligament, and had become adherent, forming the irreducible tumor before mentioned. These adhesions were broken down, and the finger passed around the neck of the sac, breaking down some old attachments. The sac was then pushed back within the abdominal ring, the wound closed by sutures, and a compress and spica bandage applied.

May 10th, ten A.M., sixteen hours after the operation.—Patient vomited occasionally during the night, but has not done so since eight o'clock this morning; pulse 92; no pain around the wound; she however still complains of some pain about the umbilicus, though not so severe as before the operation. Ordered warm flaxseed poultices to the abdomen, and patient to be kept moderately under the influence of opium. May 20th.—Patient doing well; no return of the vomiting; slight distension of the abdomen. An enema was administered last evening, which caused several evacuations of fecal matter during the night. Wound dressed; union of the edges by primary adhesion seems to have taken place. As the patient complains of some tenderness on pressure over the right umbilical and inguinal regions, a blister was applied. Opium and warm applications to the abdomen continued.

At ten o'clock this evening, fifty-two hours after the operation, symptoms of strangulation returned; vomiting of stercoraceous matter, with severe pain in abdomen; pulse 96; no increased swelling about the wound. Ordered opium, one grain every two hours. May 21.—Vomiting still continues; tympanitis increasing; pulse 120, small; extremities becoming cold. Two o'clock P.M.—Patient in a state of collapse; pulse hardly perceptible; skin cold, and covered with a clammy sweat; hiccup; and every symptom seemed to indicate that gangrene had taken place, and that the patient was near her end. Brandy ordered to be given freely. May 22d.—Patient still alive; pulse 120, and more perceptible; skin warmer, and her countenance much improved; considerable tympanitis, but less pain. 23d.—Better; pulse 100; suture removed from wound; union good. From this time the patient began to improve. Injections were administered at various times, but without any results. It was considered improper to administer a purgative, as the symptoms had indicated that gangrene of some portion of the intestine had taken place, and it was feared that increased peristaltic action of the bowels would do more harm than good. Opium in small doses was therefore administered, with a view to keep the bowels quiet and give nature time to repair the mischief.

On the seventh day after the operation, the wound re-

opened and discharged a considerable quantity of decomposed blood with pus, which had a strong fecal odor. The discharge continued, and on the eleventh day a purgative was administered, which caused a free evacuation of the bowels. A considerable quantity of fecal matter at the same time made its escape from the wound.

From this time there was a constant discharge of a thin, yellowish material from the wound, and no natural movement of the bowels. The discharge from the wound seemed to increase in quantity, and the wound itself to grow larger, until it was nearly half an inch in diameter.

Pressure by means of a compress and bandage was applied, but could not be borne by the patient. The wound remained in about the same condition for nearly three months, when the patient died from phthisis, from which she had suffered for the past year.

It is to be regretted that an examination of the body could not be obtained.

This is the second case reported in this Journal of an intestinal fistula occurring after an operation for strangulated femoral hernia, by the division of the stricture without opening the sac.

The first was a case reported in Vol. VI., p. 147, by Dr. Henry B. Sands. In his case there were no unfavorable symptoms after the operation. The wound reopened on the ninth day, and discharged fecal matter, which at first increased in quantity; the bowels, however, continued to act with natural regularity. About three weeks after the operation the discharge began to diminish, and when patient left the hospital it was so slight as to be scarcely perceived.

Since the above was written the following case has come under my notice:

On January 31st I was called to see a patient suffering from strangulated femoral hernia. The history of the case is as follows:—Patient is sixty-seven years of age, and has suffered from a femoral hernia of the left side for the past two years. Eight days ago it became strangulated, accompanied with the usual symptoms, viz. vomiting, constipation, and severe pain around the umbilicus. She sent for a German doctor who did not comprehend the case, although his attention was called to the hernia. Purgatives, injections, etc., were given without any good result. Dr. J. Lewis Smith was at last sent for, who at once recognised the trouble, and placed the case in my hands for operation. Patient was etherized, although in a very feeble condition, and an incision was made over the tumor (which was situated above Poupart's ligament), and continued down until the sac was reached. This was opened, and the intestine was found in a gangrenous condition; perforation had already taken place; no fluid was found between the sac and the intestine.

The intestine was freely opened, the stricture overcome, and a free discharge of fecal matter from the wound was the result. The corners of the wound were brought together, but space enough was left to allow the contents of the intestines to escape from the wound.

The patient recovered from the ether readily, and she was left to all appearances as comfortable as usual after such an operation, although very feeble. In less than an hour after I left the house she died. The cause of death I cannot account for except from exhaustion. No post-mortem examination was allowed.

The point in this case is this. The external condition of the sac, which was very much thickened, did not at all indicate the serious condition of the intestine within, and I opened the sac because the strangulation had existed so long, and the symptoms of the patient were so severe.

263 WEST 42D ST., N. Y., Feb. 3, 1864.

DR. C. B. WHITE, Assistant-Surgeon, U.S.A., formerly Surgeon-in-Chief of the Artillery Reserve, Army of the Potomac, is now on duty as Medical Purveyor for the U.S. forces in Texas.

SARRACENIA PURPUREA IN VARIOLA.

By NOAH C. LEVINGS, M.D.,

OF NEW YORK.

DURING the last month (January), I had the fortune to have under my care four children, in one family, sick with variola. Considering this to be an unusually favorable opportunity to decide upon the merits of the sarracenia as a "specific" for this disease (the children never having been vaccinated), I obtained the contused root of the sarracenia purpurea direct from Major Lane, of Halifax, the putative father of the "specific." I also requested Dr. Jacobi, of this city, to see the cases until their termination, independently of myself, and then to give me his opinion on the remedy.

The following is the history of the cases:—The first one, a boy, three years of age, unvaccinated, commenced, Tuesday morning, Jan. 12th, to complain with the usual symptoms of variola. On Thursday, the third day, the eruption appeared. We concluded to allow the disease to get under full head before commencing the use of the "specific." So, upon Monday afternoon, the infusion of sarracenia purpurea, an ounce to the pint, was given according to published directions, that being the fifth day of the eruption, which was now distinctly pustular. The following afternoon, twenty-four hours after commencing the remedy, there was no increased flow of urine, no flattening nor shrivelling of the pustules, as we expected. Wednesday, the seventh day, no change in the symptoms or eruption, except a lessened fever, fuller pustules, and the central depression more positive. The eighth day, of course, the pustules began to scab, and some to break and crust. By the tenth day one-half the scabs on the face had fallen off; but on the trunk and limbs the peculiar pustules were advancing through their usual course without at all being modified by the medicine.

The second case, a boy of eight years, unvaccinated, taking the disease three days later than his brother, went through exactly the course of unmodified small-pox.

We have the same history for the third case, an infant of seven months, the eruption being preceded by convulsions, and no modification of the disease or symptoms, though administering the medicine from the commencement.

In each of these three cases the pustules went through the invariable course, being on the trunk three, and on the limbs six days later than on the face.

The fourth case, a sister of the others, ten years old, whom I vaccinated, the vaccination taking the precedent of the variola by two days, was changed to a very mild case of varioloid, having but eight or ten pustules on the face. This one was about the house each day, and had no medicine.

Presuming to know the natural course of variola, and having three cases neither modified, nor the sequence of the symptoms altered by the free use of the infusion of sarracenia purpurea, Dr. Jacobi and myself consider the sarracenia as without any medicinal virtue whatever in shortening the period of variola, or "causing the pustules to wither or fall off" before the eighth day.

86 AMITY ST., February 6, 1864.

HEALTH IN THE BRITISH ARMY.—In the English infantry the average number of sick is about 50 per 1000 men; in the English cavalry a little less; in the Royal artillery a little more; and the military train and depot battalions, at most 7,000 men, furnish about 1400 admissions per annum, on account of these two corps being chiefly composed of old and young soldiers. Striking an average in the British army the number of sick is nearly 55 per 1000 of strength; in the French army 45; in the Prussian 47; and in the Austrian 48. The average time in hospital is 17 to 20 or 21 days; in the French army it is 16 days; in the Prussian army it is 16 days; and in the Austrian army it is 17 days.

Progress of Medical Science.

ON DISLOCATIONS OF THE THUMB.

J. C. WORDSWORTH, Esq., reports three cases of this dislocation, in the *Med. Times and Gazette*, showing that the difficulty of reducing them arises from the malposition of the tendon of the long flexor. The first was a compound dislocation of the first phalanx of the thumb, produced by a fall on the extended hand, the phalanx being on the dorsum of the metacarpal bone. A wound extended across, and opened the joint on its palmar aspect. After failing to effect its reduction by simple extension, a close scrutiny of the wound showed the tendon of the long flexor between the ends of the bones, having passed round the ulnar side of the end of the metacarpal bone, and by traction been drawn across the joint. Attempts to remove the tendon from its new position being unsuccessful, it was divided with a bistoury, and reduction easily accomplished, no displacement recurring. The second case was a simple dislocation upwards and backwards of the first phalanx of the thumb, with no displacement of the tendon; it being easily recognised stretching over the metacarpal bone, and drawn away from the first phalanx by the altered position of that bone. In this case reduction was effected by simple extension, only slight force being necessary to restore the bones to their proper position. The third case was a simple dislocation of the first phalanx upon the dorsum of the metacarpal bone. No trace of the tendon could be discovered. Attempts to reduce the dislocation by extension were made, and renewed, but failed. He now endeavored to replace the tendon by the following procedure, which he had previously devised: "The wrist being fully bent, so as to relax the long flexor tendon, let the surgeon take the thumb in one hand and abduct it from the fingers, while with the other he steadies the metacarpal bone. He then is to rotate the thumb, so as to make the tendon retrace its course *forwards* and *inwards* around the lower end of the metacarpal bone, using the first phalanx as a lever in this intention. If this do not succeed, let him hyper-extend the first phalanx, so as to stretch the flexor tendons, rotate the phalanx *outwards*, and then carry it round the *inner* tubercle of the metacarpal bone, so as to dislodge the tendon from between the ends of the bones." By adopting this course, the tendon was readily replaced, coaptation restored, and no tendency to displacement left. Since his attention has been directed to these cases, he has had reason to believe that dislocations of the fingers at the metacarpophalangeal joints are also complicated by the malposition of their tendons; and has succeeded in reducing them by more manipulation after considerable force had been vainly applied.

ON THE TREATMENT OF DIARRHŒA AND DYSENTERY.

Professor Skoda places a strict regulation of the diet before everything; especially is this the case with reference to every solid article and warm fluids, allowing only lukewarm soups or other drinks, and that only by a spoonful at a time. These stringent rules do not apply to those cases of mild diarrhœa, in which the patient continues to eat fruit and the like, and still soon gets well; but to very obstinate diarrhœa and dysentery, where the intestinal canal is in such a state that almost any substance introduced into the stomach acts mischievously, and where a few spoonfuls of warm soup, or a mouthful of cold water, are immediately followed by severe colics, and soon afterwards by evacuations; though in all cases it is prudent at the commencement to cut off the supply of food as far as possible, especially those articles likely to augment the disease.

He regards opium as the most valuable medicine in diarrhœa, for it keeps the sphincter in a state of permanent contraction, which is often propagated to the large intestines, the small intestine not being able to propel its contents with sufficient force to induce the irritation which causes their expulsion; and these contents being retained, their amount

may become considerably diminished by the absorption of the fluid, though frequently the canal is so diseased as to prevent such absorption; there the diarrhoea will continue in spite of the opium and the contraction of the sphincter. If opium or morphia does not suffice, it must be aided by astringents, by far the best of which, and the most easily supported, is the sulphate of zinc. He does not think tannin in its separate state either so useful or so easily borne, but that it acts better when employed in the decoction of those substances from which it is obtained. He regards alum of no use whatever in diarrhoea, but lead approaches zinc in efficacy, though less certain. The dose he recommends is a quarter of a grain, repeated every two or three hours, and at most every hour. If these means do not suffice we may have recourse to starch enemata, combining with them opium or zinc. In the most obstinate cases we must have recourse to cauterization; but this is only the case when there is a diseased condition of the lower part of the rectum. Very obstinate cases of blennorrhoea confined to the anus may be completely cured by the application of nitrate of silver in substance as high up as it can be passed.

DIGITALIS IN THE TREATMENT OF EPILEPSY.

A young child, not quite two years of age, was brought to Professor Clark's Clinic on the 24th of September last, to be treated for "fits," from which it had suffered for the last twelve months, occurring every three or four weeks—limited to one in a day, though on one day it had seven. The child was nursing; took no other nourishment; its bowels were generally costive. After questioning the mother closely in regard to the symptoms exhibited during the attack, Professor Clark was convinced that the character of the disease was epileptic, or at least epileptoid, as most of the symptoms of epilepsy were manifested in a greater or less degree. Acting upon a suggestion previously made by a medical friend, Professor Clark determined to give the digitalis a trial, and the child was accordingly put upon one drop of the tincture three times a day, with directions to increase the dose gradually as circumstances might indicate. No attack occurred, however, since commencing with the tincture, one drop of which had been taken regularly three times a day until January 14th, when the child was again presented at the clinic, nearly four months having elapsed since the last attack. The Professor remarked that if this was the result of the treatment, we might well sing the praises of digitalis; but as "one swallow does not make a summer," we cannot well judge from a single case whether the child's present favorable condition is the effect of the remedy administered, or a remarkable coincidence. Other remedies have from time to time been recommended, and been attended with success for a time, and afterwards failed to effect the cure; the sulphate of zinc is one that has borne a high reputation.

Professor Van der Kolk has had some success in the treatment of epilepsy, by applying cupping-glasses with scarification or leeches to the back of the neck, followed by seton or issue, with the view to moderate the exalted sensibility of the medulla oblongata, and prescribing internally the infusion of digitalis with small doses of tartar emetic, if the patient can bear them without nausea, to moderate still further the excited vascular action; but says he never succeeded in curing a case with digitalis alone, though he believes it contributes much towards promoting the cure. Whatever may be our future experience with this remedy, this case of Professor Clark seems of sufficient importance to claim the attention of the profession, and to secure for the digitalis a further trial in the treatment of this troublesome disease.

NOTE.—Some errors are noticed in the Progress of Medical Science on page 31, where the word grains should read grammes. The closing paragraph in that article should have appeared in connexion with the article on Wood Spirit, &c., on page 88, vol. vii. It was mislaid, and by some mistake was afterwards inserted in its present connexion.

American Medical Times.

SATURDAY, FEBRUARY 13, 1864.

HEALTH REFORM IN NEW YORK.

ABOUT twenty-five years ago the citizens of London became alarmed at the state of the public health of that city. It was found that one in every thirty-six of the population was dying annually. The diseases prevalent were small-pox, scarlatina, measles, fever, etc., diseases which almost entirely depend for their existence upon the neglect of sanitary regulations. The city had an old health organization which was ruled by the politicians. It absorbed a vast amount of money, but did nothing to promote the health of the city. A few energetic citizens determined to rescue the city from the grasp of ignorant partisans, and place its sanitary interests under the management of an enlightened Board of Health. They at once met the most determined opposition from all the officials who held office under the old organizations. The politicians held public meetings, and loudly declared that the "city of London, for health, cleanliness, effective drainage, lighting, and for supply of water to its inhabitants, cannot be surpassed." The friends of reform replied by bringing forward the tables of mortality, and demonstrating that 5000 names of dead citizens stood recorded therein, which would not have found a place in the mortuary record were these statements true. They went boldly to Parliament and demanded reform. In the language of the Registrar-General they could assert: "Instead of death coming upon our people like a sleep when the faculties are dulled by age and slow decay, it convulses tender infancy, falls with burning fevers upon man in his prime, snatches away the mother with the babe still upon her breast." "The disease-mist, arising from the breath of two millions of people, from open sewers and cess-pools, graves and slaughter-houses, is continually kept up, and undergoing changes; in one season it is pervaded by cholera, in another by influenza; at one time it bears small-pox, measles, scarlatina, and hooping-cough among your children; at another it carries fever on its wings. Like an angel of death it has thus hovered for centuries over London. The plain truth is, 134 persons die daily in London, and the great majority are untimely deaths. Children, fathers, mothers, in the prime of life; at least 38 die daily in excess of the necessary rate of mortality. 38 persons are destroyed every day in London by local causes. If these deaths took place on London Bridge, would any sensible man in the city oppose any reasonable measure devised by a minister of the crown to put a stop to the frightful sacrifice of life? If this generation has not the power to call the dead from their graves, it can close thousands of graves now opening. The poisonous death-vapors may yet be cleared away from London, and some of the sunshine, pure water, fresh air, and health of the country may be given to the grateful inhabitants by the legislature."

The result of this agitation was that the proper legislation was finally obtained, and the old and corrupt health organizations were supplanted by a Board of Health, whose jurisdiction extended beyond the city limits, and embraced all the immediately adjacent parishes. "The sanitary police is composed (under this central board of health) of one principal medical officer (at present one of the most distinguished

surgeons of the realm), subordinate to whom are 32 medical men, who have the direct supervision and execution of sanitary matters in their respective districts. Under the laws prohibiting cellar residences, licensing lodging houses, removing nuisances, requiring ventilation of tenements, etc., etc., that city has, under the administration of this medical corps, from being one of the most unhealthy, become one of the most salubrious." The death-rate has gradually diminished, until the mortality is not greater than that of all England. Truly did Parliament, by the creation of a responsible Health Board, whose jurisdiction extended to every source of disease in and around the metropolis of the kingdom, give to its grateful inhabitants the health of the country.

New York is the only city of considerable magnitude in the civilized world that is without any efficient sanitary police. Truly has Mr. Carr, the late Superintendent of Sanitary Inspection in the City Inspector's Department, in his scathing exposure of the corruption and inefficiency of that organization, said: "We have no Sanitary Department in the city at all commensurate with what the name implies. Beyond even this pretence, the city is as barren of all means to guard against disease, pestilence, or contagion, as if such emergency had never been provided for." From his personal knowledge, Mr. Carr states, "that for the last six months not a sanitary measure has received attention beyond the cleaning of the streets." "For all practical purposes," he adds, "it had been as well if no Sanitary Department were in existence." During the prevalence of such epidemics as cholera, this fact, so tersely expressed by Mr. Carr, becomes patent to every citizen. The Sanitary Committee of the Board of Health report in relation to the cholera, as it prevailed in New York in 1849, of which committee Ex Governor Morgan was an active and efficient member: "The labors of your committee during the past appalling season of sickness and death, and the awful scenes of degradation, misery, and filth developed to them by their researches, have brought into full view the fact that *we have no sanitary police worthy of the name*; that we are unprotected by that watchful regard over the public health which common sense dictates to be necessary for the security of our lives, the maintenance of the city's reputation, and the preservation of the interests of the inhabitants." Why this failure of New York, the metropolis of the western world, the centre of commerce, of education, of arts, and sciences, to have such health regulations as are dictated by common sense? Is our city naturally so healthy that we may safely dispense with all sanitary supervision of the people? Most certainly not. We may with great propriety repeat what was formerly stated: "An examination of the sanitary statistics for the year just past, not only confirms all that has been alleged respecting the condition of the public health of the city of New York for the past ten or twenty years, but demonstrates further that it is still on the descending grade; that in comparison with many of the other principal cities on this continent, it is in a worse condition than any." Had the mortality of New York been in the same ratio to the population as Philadelphia during the year just passed, 4,266 inhabitants of the former city, now resting in their graves, would be living. Are these unnecessary and preventable deaths anything less than murder!

But can any reduction in our annual mortality be made? Let the public authorities of Paris, London, Liverpool,

Philadelphia, Boston, and Providence answer? Their unanimous verdict is, that an intelligent commission, with proper authority, can render any city as healthy for the poor as well as the rich, as the average of the rural districts. And why should not this be true? The excess of deaths in every town is due to preventable diseases. Fever, scarlatina, measles, scrofula, diarrhoea, and allied diseases, which are so prevalent in cities, are surely under the control of sanitary measures. Take, for example, small-pox. This disease, one of the most loathsome in the whole catalogue, is unknown in Providence, R. I., and in Boston, except as it is imported from New York. What is true of small-pox is true of the great mass of the most fatal diseases in those cities. They have been reduced to a minimum in frequency and fatality. It has been well said that "One fact alone would appear to show that New York city is utterly abandoned to the unchecked sway of disease, and this is, that small-pox has prevailed here without interruption or official interference, from the year 1822 to the present hour, although in that period it has destroyed the lives of about 9,000 persons; and as it is fatal in only one in ten of those attacked with it, it follows that there were about 90,000 cases of it within that time, and yet we hear of no official effort to arrest its progress."

The causes of our great mortality are accurately pointed out in the report of the City Inspector for 1861. He says: "The causes of this excessive mortality must be sought for in this city, and are readily traceable to the wretched habitations in which parents and children are forced to take up their abode; in the contracted alleys, the underground, murky, and pestilential cellars, the tenement house, with its hundreds of occupants, where families cook, eat, and sleep in a single room, without light or ventilation, surrounded with filth, an atmosphere foul, foetid, and deadly, with none to console with or advise them, or to apply to for relief when disease invades them." He asks with great pertinency, "How is this state of things, which marks with shame the great city of New York, to be remedied?" Let those who believe in our present system mark well his reply. He says: "The power of remedy does not rest in me, nor in the department over which I have the honor to preside."

What resource, then, have the people of this city, but in an appeal to the Legislature to create a Health Department that has "the power of remedy?" None whatever. The appeal has again been made, and for the sake of suffering humanity we hope it will be heeded.

REPORT FROM A REBEL HOSPITAL.

THE London *Lancet* is so fortunate as to have received a report from the General Hospital of Camp Winder, near Richmond, Va. It was forwarded by "Inspector A. J. SEMMES, M.D., Confederate States Army." It is stated that this hospital is constructed for 3,000 patients, and that in June last it contained 2,500, most of whom were wounded May 3, at Chancellorsville. The hospital is composed of five divisions, each division being under the charge of a surgeon with six assistant-surgeons acting under him. The report of cases is very meagre, and, as far as published, of little value. The first is a case of ligature of both carotids, with an interval of six days, for hæmorrhage following a gunshot wound of neck. Patient survived thirty-eight hours. PROF. LONGMORE, who performs the evidently grateful office of editor of the reports, falls into the error

of stating that the ligature of both carotids within so short a period is unexampled. A London authority, MR. ERICHSEN, could have corrected him. MOTT tied both carotids with an interval of fifteen minutes, and Langenbeck ligated them both at the same time. The second case was a gunshot wound of abdomen, and recovery. The patient was under Surgeon CHAMBLISS. The report, thus far, is a most uninteresting detail of cases, and proves but too plainly that our Southern brethren are not making progress.

SARRACENIA PURPUREA IN SMALL-POX.

THE *Sarracenia* has finally been submitted to a trial, which would seem to prove conclusively that it has no specific virtues in small-pox. The cases related by DR. LEVINGS in another column, where the article was obtained from MAJOR LANE himself, are too accurate to allow a doubt of the fairness of the trial. It is time the profession put an end to the pretensions of those persons who are endeavoring to palm upon the community a remedy of no value.

THE BIRTH OF A PRINCE.

THE birth of an heir to the British Crown has given rise to the usual amount of congratulation in courtly phrases in the English papers. The extremely commonplace circumstances, however, attending the birth, have not failed to call out a certain degree of vulgar comment. The Prince of Wales and his wife were in the country, and she was engaged on the day of her confinement in skating. Her accouchement was not anticipated in two or three months, according to the regular order of things, dating from the period of marriage. She had felt some pain in the morning, but it was not ascribed to the true cause. Towards evening the symptoms became unmistakable, and then the scene began. There was no preparation for the coming event; the accoucheur was in London, and was immediately telegraphed; there were no attendants worthy of the occasion. Meantime, the progress of events showed that the denouement of the heir was more rapidly approaching than the accoucheur, and it became necessary to call in DR. BROWN, a plain country practitioner, who had the honor of officiating at the birth. The physician-accoucheur, DR. FARRE, arrived from London just too late. The child was wrapped in cotton in the absence of all baby clothing, and from a neighboring infirmary plain MRS. CONNOR was selected to wet-nurse the infant. The medical attendants issued a bulletin announcing the happy delivery by the Princess of a Prince. Thus ended a scene in high life, not at all unlike that which often occurs in the humblest cottage. The *Saturday Review*, in a very sarcastic vein, ridicules the court customs on such occasions, and takes the medical attendants to task for announcing the birth of a Prince, as though a Prince could be born, and states that it was their duty to declare simply whether the child was a boy or girl.

Two new medical dictionaries have been announced as in course of preparation in France. The first is to be called the "Encyclopediacal Dictionary of Medical Sciences," and will consist of twenty volumes octavo, of about 800 pages each, and be issued in half volumes. The contributors comprise the names of the most prominent old and young celebrities. The second will be called "The New Dictionary of Practical Medicine and Surgery," consisting of twelve or fifteen volumes, of 800 pages each. The contributors are about thirty in number.

Correspondence.

MEDICAL SOCIETY OF THE STATE OF NEW YORK.

(Continued from page 71.)

THE Society met at 3.15 P.M. The President, DR. BISSELL, in the chair.

The following permanent members and delegates from New York and Brooklyn were present:—

Drs. Joel Foster, Vice-President; N. C. Husted, J. F. Jenkins, J. K. Merritt, Henry S. Downs, Louis Elsberg, Jas. Kennedy, S. R. Percy, E. L. Beadle, Guido Furman, E. R. Squibb, Jas. M. Minor, John Ordonaux. The following New Yorkers were also in attendance: Drs. Louis A. Sayre, C. F. Taylor, Alonzo Calkins, and A. N. Gunn.

DR. HOWARD TOWNSEND read a paper upon the Glycogenic function of the Liver, which he made introductory to an experiment to prove to the Society the development of sugar in the human liver, which, though well established by the investigations of Prof. Beruud, an opportunity does not often occur to prove—because of the difficulty of obtaining a human liver in a perfectly healthy condition to experiment upon. Dr. T. explained the physiology of the liver and its cell action, so far as is at present determined, and illustrated the subject by diagrams. He gave a synopsis of Pavy's views, as set forth in his work lately published in London, wherein he controverts Bernard's idea of sugar being developed, though agreeing with Bernard in reference to the glycogene being developed in the liver, but gives it another name.

The liver-juice which Dr. T. exhibited was from the liver of a man lately killed in an affray in Albany—a man in full vigor of health, dying almost instantaneously.

Into a small amount of the juice from this liver he dropped some of the eupro-potassic test, which immediately threw down the red protoxide of copper, because of the liver sugar's affinity for the oxygen of the deutoxide of copper. The lung-juice produced no change, because in it there was no sugar, the blue color persisting. In order to corroborate this test, Dr. T. dropped some of the test (Kletzinski's) into a solution of ordinary glucose, when the red protoxide was immediately formed, just as it was in the liver-juice.

DR. TOWLER, in reply, stated that he had found sugar in the human liver on two occasions.

DR. SEGVIN read a portion of his paper on idioey, which was accepted and referred to publishing committee.

DR. ARMSBY read a paper on "Ligature of the Subclavian Artery," which was disposed of in like manner.

The Treasurer read his annual report. The chair appointed a committee to examine the same and report thereon. Both reports were accepted.

DR. STAATS, on behalf of the censors of the eastern district, reported that they examined during the past year ten gentlemen, and recommended them to diplomas.

DR. SWINBURNE, chairman of a committee to confer with the Governor and the Legislature to procure additional means for the aid of sick, wounded, and indigent soldiers, read his report—which was accepted.

DR. ELSBERG read a paper entitled "On the Means of Diagnosis of Diseases of the Larynx," which was referred to publishing committee.

DR. FURMAN presented the following from the New York County Medical Society:

"At a regular meeting of the New York County Medical Society, held January 4, 1864, the following resolution was passed:—

"Resolved,—That in view of the unsettled state of opinion among medical practitioners, concerning the propriety of advertising 'Specialties' in medical or other journals, the delegates of this Society be instructed to bring this subject before the Medical Society of the State of New York at its next meeting, with a view to the establishment of some definite regulations concerning it."

As one of the delegates of that Society, Dr. F. moved that a Committee be appointed to consider this subject and report before the adjournment of this meeting; the chair

appointed as such committee—DRS. BRINSMADE, TOWNSEND, and FURMAN.

DR. WILLARD presented a communication from the Med. Society of the County of Albany, being an address by Dr. HOWARD TOWNSEND. Referred to publishing committee.

DR. SWINBURNE read, on behalf of Dr. Otis G. Badlaws, of Clarendon, N. Y., a paper on "Extra Uterine Fœtations." Accepted and referred to publishing committee.

DR. DOWNS read a paper entitled, "On the Mutual Antidotal Properties of Opium and Belladonna," with eases and quotations. Accepted and referred to publishing committee.

DR. MERRITT read a communication from the New York County Medical Society entitled, "On the Action of Mercury upon the Liver," by JAMES L. BROWN, M.D., of New York. On motion the paper was accepted, and it was resolved that the subject of it be discussed to-morrow, after the reading of the regular papers.

An invitation was received from His Excellency Governor SEYMOUR, inviting the members of the Society to visit him at his residence on Thursday evening; which was accepted.

Adjourned to 10 o'clock Wednesday morning.

MORNING SESSION—SECOND DAY.

The session opened at ten o'clock, with a very large attendance. Prayer was offered by the Rev. Dr. Pohlman. The Secretary announced that Dr. H. F. Stevens, delegate from the Vermont State Med. Soc., Dr. M. C. Edmunds, delegate from the Connecticut River Valley Medical Association, Dr. Henry L. Sabin, a honorary member from the Massachusetts State Medical Society, and Dr. Beckwith, of the Connecticut State Medical Society, were in attendance.

DRS. SABIN and BECKWITH responded to their introduction briefly and in a very happy manner.

DR. THOMAS M. BLATENFORD, a delegate to the State Medical Society of New Jersey from this Society, presented his report, which was accepted.

DR. S. D. WILLARD presented the following papers: "Mortality of the City of New York," by Dr. Ramsay; "Regimental Surgeons of the State of New York in the War of the Rebellion, from 1861 to 1864," by Dr. S. D. Willard; "Mémorial of Dr. Abijah G. Benedict," by Dr. S. D. Willard; "Mortality of the City of Rochester, N.Y.," by H. H. Langworthy, Health Officer.

Also a communication from the Medical Society of Oneida County, entitled, "Belladonna as an Antidote to Opium, after entering the Circulation," which were all referred.

PLASTIC OPERATIONS ON THE FACE.

DR. GURDON BUCK, of New York, presented a male patient who had been the victim of an extensive destruction of the face by gangrene, and read a paper in relation to the same, entitled, "A Case in which several Plastic Operations were successfully Performed, for the Restoration of the Right Half of the Upper Lip, and adjacent Portions of the Cheek and Nose." Dr. B. stated that on the admission of the case into the New York Hospital, on the thirty-first day of December, 1862, the patient's right eye was destroyed and sunken. The right half of the upper lip, the right ala of the nose, and the adjacent portion of the cheek, besides the entire right superior maxillary bone, is gone, which left an extensive opening directly into the cavity of the mouth and right nasal fossa. To rectify this deformity, the patient was subjected to five separate operations at as many different times. Dr. B. presented photographic views of the patient's face before the first operation, one showing the result of the first operation, and one showing the result of the second operation. Also photographs showing the final results, one giving a front view, one a right side view, and one giving a left side view. The superior maxillary bone is now in the anatomical museum at Washington City.

The statements of the case were listened to with the

most marked attention. A vote of thanks was tendered to Dr. Buck for his very interesting paper and the exhibition of his case, and a resolution adopted requesting Dr. Buck to furnish a copy for publication.

DR. WILLARD, from the Committee on Credentials, introduced to the Society Surgeon Charles A. Tripler, late Medical Director of the Army of the Potomac.

BACK-ACHE IN AMERICAN WOMEN.

DR. C. F. TAYLOR read a paper entitled, "Spinal Irritation, or the Causes which tend to Produce Back-Ache in American Women," illustrated with many drawings.

DR. WILLIAM MANLIUS SMITH read a report of two cases of poisoning. Both papers were referred.

DR. SWINBURNE offered the following resolutions:—

Resolved, That this Society cause to be printed one thousand copies of Dr. Percy's paper on the Food of Cities, for the use of the Senate and Representatives of the State Legislature, and for members of this Society.

Resolved, That the Committee already appointed to confer with the Legislature be empowered to carry the resolution into effect.

Which were adopted.

DR. CHARLES A. LEE presented a communication entitled "Remarks on the Management of Lunatic Asylums in Great Britain and France, with some Suggestions for the Improvement of our own."

DR. ORDRONAU, on behalf of the Committee on the "Prize Essay," made some remarks in relation to the same, and brought the subject of vaccination up, requesting Dr. Sayre to give his views on the matter.

DR. CORLISS moved that a committee of three be appointed to confer with the Legislature relative to some action for the more perfect protection from small-pox. Adopted, and the following committee appointed for that purpose:—DRS. SAYRE, ORDRONAU, CORLISS.

DR. SAUNDERS moved that the same committee be authorized to memorialize the Congress of the United States to enact a law for the more perfect protection from small-pox in the District of Columbia, the several States, and in the army and navy, which was adopted.

Adjourned, to meet again at three P.M. to-day.

AFTERNOON SESSION.

The Society convened at the hour specified, and were called to order by the President.

DR. CORLISS presented a communication from the Washington County Medical Society, entitled, "Inaugural Address, by Dr. White." Referred.

STATE BOARD OF EXAMINERS.

DR. CHARLES A. LEE presented the following:—

UNIVERSITY OF BUFFALO,
MEDICAL DEPARTMENT.

On motion of Prof. Charles A. Lee, seconded by Prof. James P. White, it was

Resolved, That the New York State Medical Society be requested to appoint a committee to consider the expediency of, and report, a plan for the appointment of a State Board of Examiners for the degree of Doctor of Medicine, and to report at the next meeting of the Society.

Resolved, That the same committee be instructed to bring the subject before the next meeting of the American Medical Association, and that the Delegates of this Society be instructed to urge the general adoption of the same plan in the other States of the Union. Carried unanimously.

THOS. F. ROCHESTER, Secretary.

SANDFORD EASTMAN, Dean of the Faculty.
BUFFALO, Feb. 2, 1864.

DR. B. P. STAATS moved: That the resolutions be adopted by the Society, and that the same committee be instructed to bring the subject before the next meeting of the American Medical Association, and that the delegates of this Society be instructed to urge the general adoption of the same plan in the other States of the Union.

The resolutions were adopted.

DR. E. R. SQUIBB presented the final report of the Committee on the subject of the revision of the United States Pharmacopœia.

DR. PERCY moved that the thanks of the Society be

presented to Dr. Squibb for the efficient manner in which he has discharged the laborious duties assigned to him; and that a copy of the resolution be transmitted to him by the officers of the Society. Adopted.

TRANSPORTATION OF COMPOUND FRACTURES OF THIGH.

DR. SWINBURNE read a paper on "Compound Fractures of the Thigh, and Means for Transportation," and exhibited a drawing of an army stretcher prepared for the treatment of compound fracture of the thigh upon the field.

The reading of the paper was followed by complimentary remarks by Surgeon Tripler, of the U.S.A., Drs. Green, of Massachusetts, and Sayre, of New York. Dr. Corliss, of New York, suggested the wisdom of sending a load of straw into the field as a substitute for newfangled splints and similar contrivances. The discussion ended in the following resolution by Dr. Kennedy, which was adopted: "That the paper by Dr. Swinburne, and the recommendations therein contained, and the instrument devised by him, be referred to the Surgeon-General of the State of New York."

DR. O. WHITE presented by title the "Report of a Case of Impalement through the Vagina."

Adjourned, to meet at eight o'clock this evening.

EVENING SESSION.

The Society met at eight P.M. in the Assembly Chamber, the Vice-President, Dr. Joel Foster, presiding.

DR. D. P. BISSELL, the President of the Society, delivered the annual address, as required by statute. After which a resolution of thanks was passed.

MORNING SESSION—THIRD DAY.

The Society was called to order by the President, and the Rev. Dr. Tatlock offered a prayer. The following is a list of the gentlemen's names registered:—

Drs. D. P. Bissell, Joel Foster, S. D. Willard, C. E. Van Anden, N. C. Husted, Guido Furman, Wm. Govan, M. C. Hasbrouck, J. O. Cobb, F. Tourtelot, A. Haun, A. L. Saunders, John E. Todd, J. F. Jenkins, J. Towler, E. S. Lyman, Jas. Kennedy, Jas. Ferguson, Jas. Lee, Fred. Hyde, B. P. Staats, E. H. Parker, H. K. Willard, H. S. Crandall, A. F. Doolittle, Geo. W. Bradford, Alden March, P. V. N. Morris, Louis Elsborg, Jas. Whitford, A. J. Dallas, D. B. Whitney, J. King Merritt, W. L. Appleby, C. M. Crandall, J. H. Armsby, John Ferguson, Hiram Corliss, J. G. Orton, C. C. Brinsmade, S. O. Vanderpoel, T. W. Blatchford, A. D. Hull, Howard Townsend, John Swinburne, J. T. Williams, R. L. Allen, E. R. Squibb, J. S. Weidman, D. W. Burdick, R. Blawis, R. H. Harrington, J. K. Chamberlayne, J. Newkirk, E. L. Beadle, H. S. Downs, Jos. Bates, John Ordonaux, John V. Holt, H. C. Gray, M. M. Wood, E. W. Bottum, John P. Gray, Austin White, Alex. Ayer, P. P. Staats, Wm. H. Bailey, E. M. Carmichael, M. L. Finch, — Wolcott, Jas. H. Curry, John H. Reynolds, S. H. Freeman, M. H. Colby, J. K. Leaming, O. M. Allahan, P. McNaughton, Jas. Thorn, Avery Cook, Jas. M. Minor, J. N. Northrop, L. Barton, Wm. M. Smith, E. W. Howard, J. V. Lansing, H. B. Salmon, Wm. Rockwell, Jacob Hant, E. S. F. Arnold, I. Botsford, S. R. Percy, J. G. Beckwith, M. C. Edmonds, John Pindar, H. F. Stevens, Oliver White, Jos. C. Hutchinson, I. E. Casey, T. B. Reynolds, J. G. Snell, Henry L. Sahine, C. R. Agnew, Peter Faling, J. H. Wheeler, M. F. Cogswell, Douglas Bly, Chas. A. Lee, J. V. P. Quackenbush, P. Van O'Linda, H. O. Carrington, Jas. McNaughton, Israel Parsons, Wm. F. Carter, Thos. Hun, S. W. Butler, L. A. Sayre, Wm. McCullum, L. G. Warren, J. R. Bontware, H. G. Bigelow, M. L. Meade, J. S. Mosher, J. E. Smith, J. M. Sturdevant, W. H. Craig, F. L. V. Chapin, Gurdon Buck, J. F. Flint, Jos. Lewis, Cyrus Ramsay, Staats Winne, W. C. Anderson, Chas. S. Tripler, Edward Duffy, Levi Moore, S. G. Delamater, Alex. Ennis, W. W. Greene, A. M. Smith, M. H. Burton, D. M. Devendorf, S. W. Greene, J. M. Delamater, Henry Marsh, W. H. Richardson, M. W. Burns, Asahel Perry, Archibald Gow, H. L. Sahurn, J. R. Preston, H. S. Case, E. R. Seguin, Daniel Mayhew, A. N. Gunna, Geo. W. Little, Thos. E. Burtell, Chas. F. Taylor, L. G. Warren, F. S. Lowe, Levy McLane, B. S. Catlin, Asher Wright, H. B. Mayhew, Geo. W. Barr, W. G. Biglow, A. Calkins. Making a representation of 166.

DR. N. C. HUSTED read "A Case of Molar Pregnancy."

DR. J. G. ORTON presented a report from the standing committee on "Medical and Surgical Statistics," which was accepted, and, on motion, the Committee was requested to continue its labors.

DR. ORTON also read a paper on the use of bi-chromate of potassa in the treatment of diphtheria.

DR. ELSBERG presented several instruments—with remarks connected with his specialty.

The Committee on the President's Inaugural Address reported against the application for an amendment of the statute so as to provide for the election of more than one Vice-President. The Committee approved the recommen-

dation of the President relative to compensating the Secretary, and urged the propriety and justice of providing therefor.

The Committee recommended that hereafter the salary of the Secretary shall be \$—, and that some compensation shall be granted him for services already so faithfully rendered; that in order to meet the necessary expense, if the report should be adopted, the Committee recommended a self-imposed tax on each member, permanent and delegate, of \$—.

The report was accepted and adopted.

DR. STAATS moved to fill the first blank with two hundred and fifty. Adopted.

DR. STAATS moved that the check for \$100, returned to the Society by the Secretary, for diplomas delivered by him, be cancelled, in consideration of the services rendered by him the past year.

An amendment was offered to add to that sum \$150, so as to make the salary for the past year \$250, which was accepted, and the resolution adopted.

The last blank in the report was filled with the word *one*.

DR. KENNEDY moved that a Committee be appointed to equalize the tax on societies, with a view to meet the foregoing resolutions, and report at the next meeting of the Society. Which was adopted, and the Chair appointed Drs. KENNEDY, BRINSMADE, and WOLCOTT.

DR. BRINSMADE presented the following report and resolutions:—

The undersigned, appointed a Special Committee to report upon a resolution passed by the Medical Society of the County of New York, in relation to the propriety of medical practitioners advertising their "Specialty" in medical or other journals, and referred to this Society for decision, beg leave to offer the following resolutions:—

Resolved, That in the opinion of this Society it is impossible to define the limits of advertising "Medical Specialties," either in medical or other journals.

Resolved, That advertisements indicating location and residence, are the utmost limits of self-announcement, consistent with professional dignity; and that all reference to special branches of medical practice, as extra inducements to patronage, should be deemed violations of the code of medical ethics.

Resolved, That hereafter any medical practitioner, so offending, shall be deemed disqualified as a Delegate to or for membership of this Society; and if already a delegate to or member thereof, shall be deemed a fit subject for discipline.

Resolved, That this Society recommends all medical societies in the State of New York to adopt the foregoing resolutions, with a view to establish the true dignity of our profession.

Resolved, That the foregoing resolutions be transmitted to the American Medical Association at its next annual meeting, as an expression of the opinion of the Medical Society of the State of New York, and that for this purpose a Committee of Presentation be appointed.

Signed: THOS. C. BRINSMADE,
HOWARD TOWNSEND,
GUIDO FURMAN.

The report was accepted, and on motion of DR. JENKINS, the subject was made the special order for the second day of the next annual meeting at twelve M.

DR. ORTON, Secretary of the Nominating Committee, presented that Committee's report, and the Society elected the following officers, censors, permanent and honorary members, delegates, committees, etc.

President, FRED. HYDE, M.D.

Vice-President, GEO. J. FISHER, M.D.

Secretary, S. D. WILLARD, M.D.

Treasurer, J. V. P. QUACKENBUSH, M.D.

Committee of Publication.—Drs. S. D. Willard, S. O. Vanderpoel, Samuel H. Freeman.

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Recommended to the Regents of the University for the Degree of Doctor of Medicine:—Drs. Leonard G. Warren, of Albany Co.; R. Spencer Chapin, of New York City.

Delegates to National Quarantine and Sanitary Convention:—Drs. John G. Adams, R. L. Allen, Elisha Harris, T. C. Brinsmade, John H. Griscom, Alden March, T. L. Mason, G. W. Bradford, John Boardman, Joel Foster.

Delegates to State Medical Society, Connecticut:—Drs. T. C. Finnell, H. D. Bulkley, S. O. Vanderpoel.

Delegates to State Medical Society of New Jersey:—Drs. Lewis A. Sayre, E. S. F. Arnold, John Bell.

Delegates to State Medical Society of Massachusetts:—Drs. A. L. Saunders, John Ordronaux, J. M. Armsby.

Delegates to State Medical Society of Vermont:—Drs. Joseph Bates, W. P. Seymour, John Swinburne.

Delegates to State Medical Society of New Hampshire:—Drs. Samuel Hart, J. V. P. Quackenbush, Hiram Corliss.

Delegates to State Medical Society of Pennsylvania:—Drs. D. P. Bissell, N. C. Husted, John E. Todd.

Delegates to American Medical Association:—Drs. J. M. Minor, B. P. Staats, J. F. Jenkins, Wm. Govan, H. A. Carington, T. W. Blatchford, G. W. Bradford, J. M. Pruyn, D. P. Thomas, A. Van Dyke, A. F. Doolittle, D. Colvin, Fredk. Hyde, J. P. White, Oliver White, Philander Stewart, A. L. Landers, Wm. Taylor, Wm. Manlius Smith, James O. Pond, John Ordronaux, John Swinburne, Augustus Willard, C. L. Mitchell, R. L. Allen, C. M. Crandall.

On motion of Dr. B. P. Staats the "Merritt Cash" Prize Committee of last year was continued for the present year.

On motion of Dr. Vanderpoel, Drs. O. White, N. C. Husted, and Jos. King Merritt were appointed a Committee from New York city, to submit some plan at the next annual meeting for expediting the business of the Society.

Dr. Parker moved that \$3500 from the funds of the Society be added to the "Merritt Cash" prize fund, to make it \$7000, and that the same Committee be continued, which was adopted.

Dr. Ordronaux moved that the "Cash Prize" Committee be authorized to bestow a medal of the same value as the prize, and in lieu thereof, upon the successful competitor, if he shall so choose to receive it.

On motion of Dr. Staats a vote of thanks was passed to the retiring President, the Secretary, and to the Clergy who had officiated for their service.

On motion the Society adjourned *sine die*.

The retiring President's address was spoken of in flattering terms. The members and delegates of the Society were the guests of Dr. March on Tuesday evening; of Dr. Quackenbush on Wednesday evening; and his Excellency the Governor, on Thursday evening.

NEW YORK STATE MEDICAL SOCIETY.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—The late meeting of the State Medical Society in this city suggests some reflections. Whoever has regularly attended these annual gatherings must have noticed the growing interest manifested in them by the profession throughout the State, as evinced in the increasing assemblages from year to year. So far as the country representation is concerned, both by permanent members and delegates, there is a disposition to send the best men in the profession. And the tone of elevation in this respect is markedly apparent. While I would by no means disparage the representation from the larger cities, the absence of very many gentlemen who, by their attainments and position in the profession, would confer an additional dignity to the body, is painfully apparent.

It was gratifying to see Dr. Buck at the meeting; but where were Drs. Willard Parker, Alonzo Clark, Jas. R. Wood, Flint, Hamilton, Draper, J. M. Smith, Stephen Smith, Markoe, and many other representative men in your city? Is it right for such gentlemen to stay away because the proceedings have little interest for them? This Society should be, as it is intended, the representation of the best Medical talent of the State.

The volumes of Transactions, which are now widely disseminated, should be the exponent of the medical status for industry and research. Can we truly say they take that standard? There are men in the profession in this State who rank second to none in the world. The very extent of the State, its varied climatic influences, should stimulate the largest inquiry and bring about large results.

There is one way to elevate the standard of this Society to the point which it should attain, and that is by the best men coming regularly to its gatherings, and making the Transactions the organ of their studies and experience.

Another point to notice, is the manner in which the meetings are conducted. When the assemblage was small, and the papers presented few in number, it was feasible and desirable that each should be read and discussed, thus developing from members their own ideas upon a subject. This course is now utterly impracticable. From the increased size of the gatherings, and the number of papers presented, it is impossible in most instances to read more than a mere abstract, and any discussion of the merits is out of the question. The paper is at once referred to the publishing committee, upon whom devolves the onus of publishing, it may be, an indifferent communication, or, if rejected, of incurring the personal animosity of the writer.

Irrespective of this, there is another objection. The varied tastes of the members render it tedious to sit and listen to communications in which they have little interest. If, after the transaction of general business, the Society should resolve itself into sections, communications could receive a more impartial consideration, debates upon the merits and views of the paper would be evoked, new or suggestive ideas started, and a universal feeling prevail that time thus spent was profitable. A committee composed of Drs. White, Squibb, and Husted, was appointed to consider this subject and report at the next meeting.

One other point is the volume of Transactions. These should comprise the "crème de la crème" of thought on medical topics during the year. Each Medical Society and Association throughout the State should send to the State Society such papers as are really worthy of preservation. In the city of New York alone a rich mine of material is annually elaborated. The County Medical Society, the different sections of the Academy of Medicine, the Pathological Society, should be only so many fields from which materials should be sifted and collated for this garner. Were this so, it seems to us a true impetus would be given to the influence of this Society. The Transactions would be sought for, as they truly can and may be, as the exponent of medical progress in this country. Such a course would in no way interfere with that other indispensable

outlet, the medical journals. They should represent the current literature of the day; nor would it deprive them of giving, as at present, abstracts or resums of valuable papers. They cannot be expected to treat of any topic exhaustively, as may be done in papers for the Transactions.

Pardon me for this discursive letter. Should it tend in any way to increase an interest in the Society, or stimulate to exertion in its behalf the best intellect of the profession, I should feel amply repaid.

Yours, etc.,

S. OAKLEY VANDERPOEL, M.D.

ALBANY, FEB. 6, 1864.

Army Medical Intelligence.

CIRCULAR, No. 2.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., January 19, 1864. }

The attention of Medical Officers in charge of U.S. Hospitals is called to the imperative necessity for more strict compliance with Paragraph 1286, Revised Army Regulations, 1863, regarding Descriptive Lists of soldiers leaving hospitals. Whether a soldier be transferred from one hospital to another, to his regiment, or to any other point, his complete and certified descriptive list must be at once transmitted to the proper officer.

Hereafter, failure to comply with this regulation will be considered disobedience of orders, and as such reported to the Secretary of War for his action.

JOS. K. BARNES,
Acting Surgeon-General.

MEDICAL SOCIETY OF THE 2D DIVISION, 3D ARMY CORPS, ARMY OF THE POTOMAC.—The medical officers serving in the 2d Division, 3d Corps, now in camp near Brandy Station, Va., have organized a medical society with the following named officers:—President, Surgeon Charles R. Irwin, 3d Excelsior Regiment, and Surgeon-in-Chief 2d Brigade; Vice-President, Asst.-Surgeon J. Theodore Calhoun, U.S.A., Surgeon-in-Chief of the Division; Recording Secretary, Asst.-Surgeon Charles F. J. Lehlbach, 7th New Jersey Vols.; Corresponding Secretary, Asst.-Surgeon Thomas Crozier, 16th Mass. Vol. Inf.; Treasurer, Surg. D. W. C. Hough, 7th New Jersey Vols. The society holds weekly meetings, at which essays on military medicine and surgery are read by some member appointed for that purpose, the subject of the essay afterwards being discussed by the members generally.

ORDERS, CHANGES, &c.

Surgeon S. W. Gross, U.S.V., has returned from leave to Morris Island, S. C., and resumed his duties as Surgeon-in-Chief.

Assistant-Surgeon H. C. Roberts is on duty at Norfolk, Va., as Attending Surgeon, Fort Norfolk and the City Jail.

Surgeon Lewis D. Harlow, U.S.V., has been relieved from duty at General Hospital No. 3, Nashville, Tenn., and assigned to General Hospital No. 3, Chattanooga, Tenn.

Surgeon C. A. Cowgill, U.S.V., has been relieved from duty as Superintendent of General Hospitals, District of North Carolina.

Surgeon Daniel Mecker, U.S.V., has relieved Surgeon Shippen, U.S.V., in charge of General Hospital and Convalescent Camp, Camp Nelson, Ky. Surgeon Shippen has been ordered to Knoxville.

Surgeon James Leete, U.S.V., has been relieved from duty in Baltimore, Md., and assigned to Wilmington, Del.

Surgeon D. P. Smith, U.S.V., is on leave of absence at Springfield, Mass.

Surgeon Lincoln R. Stone, U.S.V., has been relieved from duty in the Office of the Medical Director, Department of West Virginia, and has relieved Acting Assistant-Surgeon J. R. Bell, U.S.A., in charge of the General Hospital, Gallipolis, Ohio.

Assistant-Surgeon H. L. W. Burritt, U.S.V., is on duty with 1st Division, 9th Corps, Knoxville, Tenn.

Leave of absence for twenty days, with permission to apply for forty days' extension, has been granted Surgeon J. R. Ludlow, U.S.V.

Surgeon J. E. Herbst, U.S.V., has been relieved from duty with the 12th Army Corps, and assigned to Cumberland Hospital, Nashville, Tenn.

Assistant-Surgeon Robert McGowan, U.S.V., to duty at General Hospital No. 4, Knoxville, Tenn.

Assistant-Surgeon A. B. Chapin, U.S.V., has relieved Assistant-Surgeon Henry C. Parry, U.S.A., at Portsmouth, Va.

General Hospitals Nos. 1, 2, and 3, New Albany, Indiana, Branch 12 of General Hospital No. 1, and Branch 10 of General Hospital No. 2, at Louisville, Ky., have been closed.

Camp Distribution, near Alexandria, Va., will be broken up as soon as practicable, and Camp Convalescent, at Alexandria, Va., will hereafter be, and be known as, "Rendezvous of Distribution, near Alexandria, Va.," and the place from which all men fit for field service, arriving in the Department of Washington, will be distributed to their regiments. In future, none but men fit for field service, and deserters, will be sent to this rendezvous. The Surgeon-General will see that all men in General Hospitals are transferred to the Invalid Corps, discharged, or retained for treatment until fit for field service, as may be proper in each case, unless otherwise disposed of by proper authority, and not forwarded to this camp until they are fit for field service, as has heretofore been the custom.

Medical Cadet Joseph Welsh, U.S.A., has been sentenced by Court Martial to be dishonorably discharged the service of the United States, for obtaining money from soldiers on promise of procuring their discharge.

Surgeon Josiah Curtis, U.S.V., has received permission to visit Washington, for the settlement of his accounts.

Surgeon James D. Strawbridge, U.S.V., has been relieved from duty as Examining Surgeon of Recruits at Philadelphia, Pa., and will report in person without delay to Lieut. Colonel J. V. Bomford, 10th U.S. Infantry, Superintendent Volunteer Recruiting Service at Harrisburg, Pa., for duty as Examining Surgeon of Volunteer Recruits at that place.

D. D. Hitchcock has been mustered into the service of the United States as Assistant Surgeon, 2d Indiana Regiment, to date March 1, 1863.

Hospital Steward Charles Thomas, U.S.A., has been honorably discharged the service of the United States.

Surgeon William A. Conover, U.S.V., has been assigned to duty as Surgeon in Chief, Sub-district of Pamlico, Headquarters at Washington, N.C.

Surgeon Thomas A. Worrall, U.S.V., now on duty at Depot for Drafted Men, Riker's Island, New York, to report to Assistant Surgeon-General R. C. Wood, U.S.A., at Louisville, Ky., for assignment to duty.

Surgeon Alexander H. Hoff, U.S.V., now on duty in charge of Hospital Steamer Charles McDougall, at Louisville, Ky., to report to the Commanding General, Department of the East, for assignment to duty, as soon as his presence before a Court Martial now in session in this city can be dispensed with.

William Storer (alias William Brown), a recruit of the General Service, U.S.A., will, upon the ground of minority, be discharged the service of the United States upon the receipt of this order, at the place where he may be serving. The expenses incurred in the enlistment of said recruit will be deducted from the pay of Acting Assistant Surgeon R. A. Martiu, Examining Surgeon at Harrisburg, Pa.

Surgeon Henry James, U.S.V., is hereby relieved from duty in the Army of the Potomac, and will report in person without delay to the Commanding General, Department of the Susquehanna, for assignment to duty.

Upon the recommendation of a Board of Officers, instituted by Special Orders No. 294, July 3, 1863, from the War Department, the following named officer is hereby honorably discharged the service of the United States on account of physical disability, with condition that he shall receive no final payments until he has satisfied the Pay Department that he is not indebted to the Government:—Assistant Surgeon H. C. Steadman, 5th Penn. Vols.

So much of Special Orders No. 45, of 1863, from the War Department, as dismissed Assistant Surgeon W. H. Wiser, 2d New York Volunteer Artillery, has been revoked, and he is discharged by resignation, as of the date of the aforesaid order of dismissal.

So much of Special Orders No. 518, November 21, 1863, from the War Department, as honorably discharged from the service of the United States, on account of physical disability, Assistant Surgeon David H. Silver, 11th Ohio Vols., has been revoked, upon recommendation of his Commanding General, and he is restored to his command, with pay from the date on which he rejoins his regiment for duty, provided the vacancy has not been filled, evidence of which must be obtained from the Governor.

Surgeon Levi H. Holden, U.S.A., will at once resume his duties in the Department of the Monongahela.

Surgeon W. F. Edgar, U.S.A., has been detailed as member of a Board of Officers ordered to convene at Fort Schuyler, New York Harbor, on the first day of February, 1864, to examine into the physical ability, moral character, qualifications, and general fitness for promotion of certain officers of the U.S.A.

Surgeon W. S. Thompson, U.S.V., now on duty with the 16th Regiment Invalid Corps, at Elmira, New York, has been assigned to duty as Post Surgeon at that place.

Assistant Surgeon Samuel Adams, U.S.A., has been relieved from duty with Surgeon-General William A. Hammond, U.S.A., and will report in person to the Acting Surgeon-General, Washington, D.C.

Surgeon Ferdinand V. Hayden, U.S.V., has been relieved from duty in the Department of the South, and will report in person for duty to Lieutenant Colonel A. C. Hamlin, Medical Inspector, U.S.A., Department of Washington.

Surgeon Edward W. Owen, Sickles Cavalry, New York Volunteers, having tendered his resignation, is honorably discharged the service of the United States, to enable him to accept a similar position in the 16th New York Artillery.

The leave of absence granted Surgeon W. P. Boell, 131st New York Vols., in Special Orders No. 2, Headquarters, Department of the Gulf, is extended twenty days.

Assistant Surgeon Charles F. Haynes, U.S.V., is authorized to visit his home in Maine before reporting to the General Commanding the Army of the Potomac, in compliance with Special Orders No. 14, War Department, January 11, 1864, the delay and absence of Assistant Surgeon Haynes not to exceed fifteen days from January 26, 1864.

The leave of absence granted Surgeon J. R. Lindlow, U.S.V., in Special Orders No. 3, January 5, 1864, from Headquarters, Department of the Gulf, has been extended forty days on Surgeon's certificate of disability.

Permission to visit Washington City, in order to attend to the settlement of public business connected with the Medical Department, 12th Maine Volunteers, of which he was formerly Surgeon, has been granted Surgeon James H. Thompson, U.S.V.

Assistant Surgeon W. V. Cowan, 34th Ohio Vols., has been honorably discharged the service of the United States to accept a new commission.

Original Lectures.

LECTURES ON
GUNSHOT INJURIES OF THE HEAD.

By FRANK H. HAMILTON, M.D.,

PROF. OF MILITARY SURGERY AND FRACTURES AT BELLEVUE HOSP. MED.
COLLEGE, AND LONG ISLAND COLLEGE HOSPITAL; SURGEON
TO BELLEVUE HOSPITAL; LATE MEDICAL INSPECTOR,
U.S.A.

LECTURE II.—PART I.

GENTLEMEN—I propose to recapitulate a small portion of my last lecture, commencing with gunshot injuries of the head. In my general remarks upon gunshot injuries I called your attention to an occasional accident upon the field which had been supposed by some of the older surgeons, and by the soldiers generally, to be produced by the wind of a ball. I shall take this occasion to relate to you two cases where the injury was inflicted upon or near the head, and to explain to you, as far as I am able, the resulting phenomena.

After the battle of Blackburn's Ford, on the eighteenth of July, 1861, I saw a man by the name of Wenzel who was lying down slightly inclined to sleep, but not comatose. I observed that the right side of the face and both of the upper eyelids were reddened. The account which he gave of himself was this:—I was in the front ranks when I saw a cannon shot or shell approaching; I immediately dodged to the left, and for a moment I was unable to see or to hear. When I put up my head immediately after, I found that a man behind me had been struck in the lower extremities by the same ball." The man to whom he referred suffered double amputation as a consequence. This was a very intelligent man; therefore I interrogated him very particularly in regard to the character of the injury. It was very plain that the ball had not hit him; I asked him if he had not buried the bruised side of his face in the sand, and he said that he did not, but that he had fallen upon the opposite side. The following day I saw him again, and found him in very much the same condition, except that the side of his face and his upper lids were a little more swollen, and there was a slight inflammatory action of the conjunctiva, and covering the surface of the skin there were small dark-colored petechiæ. This is all of the history of that case. The man continued to do well from that time, and finally recovered. One naturally asks—What could have produced this result? It is my impression that it was the rough passage of the cap over the side of the face which was struck by the shot. In the absence of any other mode of explanation of the injury, I am forced to adopt this.

I will cite another instance. On the same occasion John Hays lost his right ear by a cannon shot. I saw him shortly after the injury was inflicted. He, too, was partly comatose and inclined to sleep, but was easily aroused. There was not the slightest abrasion upon the side of his face; nothing but the injury to the ear which was palpable to the senses. It was very evident that he had received a shock; he was inclined to sleep, but not profoundly. The only explanation that I could offer of his case was, that the ball impinged upon the cap, and that the cap protected the skin from abrasion, while at the same time the force of the missile was sufficiently great to produce a slight amount of concussion and tear off his ear. The explanation may not be very satisfactory; but when you see examples in which a cannon ball has taken away a sword which had been securely fastened to the side, or knocked a gun out of the hand, or taken away portions of the clothing or of the cap, and in other cases inflicting severe injuries by cutting off large portions of the body and leaving the rest of the individual unharmed, you must certainly arrive at the conclusion that the mere wind of the ball can do no injury.

In my general remarks I cited an interesting case of the
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passage of a ball over the body of a man which had produced a fatal result, and in which it was not apparent that it had impinged upon the skull or upon any other part of the body. This was the case of a man who was injured at Harrison's Landing during the severe bombardment in July, 1862, which continued incessantly for an hour or so. The account of the sergeant, who saw the man at the time of the injury, was, that the shot struck the ground in front of where the man was sitting, and, rebounding, rolled over him, and that he fell back dead. Upon examining the man afterwards we could not find the slightest injury upon his person. This was a very queer case, but there is every reason to suppose that the man was struck after all. Large, round balls, during their passage through the air and when their force is nearly expended, are revolving upon their own axes, and are, therefore, not so likely to tear the tissues against which they strike. Death, if it occurs, is produced by concussion; and the fatal result is so instantaneous that no extravasation of blood is likely to result any more than in a dead body if a cannon ball should roll over it.

Next, I called your attention to those injuries of the scalp produced by smaller missiles; for example, where a rifle-ball had simply impinged upon the surface of the scalp, producing a slight abrasion of the integument, which accident is usually accompanied by some degree of concussion, either to the skull, to the meninges of the brain, or to the brain itself, and which, I have said, you are not to regard as trivial accidents. Although the patient may not seem to have suffered any severe injury, you are to anticipate that sooner or later there may be an ulceration along the track of the ball, or that there may result necrosis, or meningitis, or cerebritis, and that the patient may ultimately die. And I cited as an illustration of injuries of this class the case of Colonel Farnsworth, who assumed the command of the Ellsworth Zouaves after the death of Colonel Ellsworth. He received an injury of such a character, which was exceedingly slight and superficial. I saw him myself, and examined him particularly, and all that was visible was a very trivial scalp wound. He was taken into a hospital in Washington, and there I saw him again at the expiration of seven or eight days. He was then very irritable, and had been quite ill, but still his friends all thought that his recovery was certain. Three or four days after this, if I remember correctly, the symptoms became more grave, and he died evidently from the injuries which his brain had received.

I then called your attention to a class of accidents which seemed more serious, where the ball impinges obliquely upon the scalp, and penetrates the integument, and lies some distance from the point at which it has entered, resting perhaps against the occipito-frontalis tendon, the pericranium or the skull itself, in nearly all of which examples you will find the ball very much flattened. I told you also that if you find a hole in the head which does not penetrate the skull, the ball will generally be found underneath the scalp. *Not always, however,* for the missile may rebound and escape; but, as a rule, you will find it somewhere under the scalp more or less remote from its entrance; and I cited two examples to illustrate this statement.

Now, these accidents, but slight in appearance, are very apt to be followed by serious results; first, there is danger that you will have necrosis of the outer plate of the skull; next, there is danger that the patient will suffer from concussion or from inflammation, which may ultimately prove fatal.

I remarked to you, also, that injuries of the skull on the battle-field are by no means as innocent as injuries which may at first seem equally grave received in civil life; and I cited to you the example of a man in the hospital, who received a blow upon the head by the end of a stick of wood. There was a thrombus from which we anticipated nothing serious, because the missile was an elastic body, and would rebound, and consequently not produce that

severe concussion of the brain that would be produced by a piece of lead—a solid, heavy, unresisting, inelastic body. So you are always to look upon these injuries as cases demanding attention, and which may give rise to serious complications in the end.

Finally I mentioned those accidents in which the ball has struck upon the skull and made a slight indentation; and upon this point, I believe, I was not fully understood. In these accidents you have graver symptoms of concussion; the concussion is more severe than in either of the others that I have named; there is more to be apprehended from the subsequent irritation and inflammatory action of the brain and its meninges, as well as a greater likelihood of exfoliation of more or less of the skull. These injuries may be produced by a round ball, a conical ball, or a fragment of shell; and I have before me a young gentleman who has received an injury of this sort. This young man, John Tucker, belonging to that famous regiment, the 14th Brooklyn, which has been in nearly all the engagements in connexion with the Army of the Potomac, was wounded at the battle of Gettysburg on the first day of July, 1863. He was standing in the front ranks when he received a wound from a fragment, which, in all probability, exploded from behind, the missile having previously passed over his head. He suffered from temporary concussion, but recovered after a few moments, and walked off the field himself. There was considerable destruction of the integuments, but no signs of fracture at the time visible; it is not precisely, therefore, the case in point, but sufficiently near to impress upon you the principle which I wish to illustrate.

After the lapse of several weeks or months, suppuration having taken place, the bone was discovered to be necrosed, and gradually exfoliated a fragment, separating to the extent probably of three and a half inches in length by two and a half in breadth. This diagram represents the size and shape of the fragment that was removed. The inflammation which invaded this portion of the bone, as a consequence of the concussion, extended along the periosteum, and perhaps along the surface of the bone for several inches to the opposite side of the occipital bone, and there have been several fragments exfoliated from this point also. This case is interesting in another point of view, showing that the injury, though sufficient to occasion such an extensive destruction of the bone, has never given rise to any compression of the brain, paralysis, or convulsions; in short, he has not had any grave cerebral symptoms whatever. What I wish to state more particularly is, that, if a ball has impinged upon the skull, and made a slight indentation, you have a great deal to anticipate in the future; you *may* have compression and paralysis; you *may* have convulsions; you *may* have inflammation of the brain; all these results are very likely to follow, and yet it is the general opinion of army surgeons that you are not to trephine. That is the point, gentlemen!

Many of the old army surgeons taught that, if a ball impinged upon the skull, it was your duty to trephine in anticipation of results; and that, if a ball had produced a fracture either with or without depression, it was still more imperative. Now, it is this doctrine which we antagonize in military practice, and which the experience of the present day has proved to be incorrect. We never make the operation for trephining in anticipation of any result; but, on the contrary, we avoid all surgical interference, in the belief that by so doing we give the patient the best chance. The head of the patient must be shaved, *wet* cloths applied, quiet enjoined, his bowels kept open, and his diet must be simple. The brain has received a severe concussion, and when signs of compression are not present, it is proper to infer that concussion is the main injury; it is not of depressed skull that the patient is now so likely to die. He is infinitely in more danger from the concussion, which is so apt to result in inflammation.

(To be Continued.)

Original Communications.

OBSERVATIONS ON TYPHUS FEVER,

AS IT OCCURRED IN BELLEVUE HOSPITAL FROM JULY 1, 1863,
TO JAN. 1, 1864.

By IRVING W. LYON, M.D.,

HOUSE-PHYSICIAN.

DURING the past six months, from July 1st, 1863, to Jan. 1st, 1864, ninety-three cases of fever have been received and treated in the male fever ward of Bellevue Hospital. Of these by far the greater majority were cases of typhus, there being occasionally a case of typhoid. Out of this number eleven have died, or 11.82 per cent. A daily record of nearly all the cases has been preserved with considerable care; and, as their review presents many points of interest, it may not be uninteresting to consider the general principles arrived at by the clinical interrogation of the disease.

The access, in almost every instance in which it could be ascertained with any degree of certainty, was sudden, the patient stating that he felt perfectly well up to a certain period from which it is usual to date the invasion; while the precursory symptoms, described by most authors as the prodromata, and consisting of a disinclination to bodily and mental exertion, a feeling of languor and malaise for a period ranging from a few days to a month and even longer, were so infrequent that they were regarded as exceptions to the rule. Several of the patients were so situated, at the first manifestation of the fever, that a mistake in this respect was well nigh impossible, they being already inmates of other wards in the hospital, and subject to the daily observation of their medical attendants; and the fever in all such cases, that occurred in my own service, first announced itself by chills, headache, etc. The initiatory symptoms of which the patients almost invariably complained, were chills and headache. When questioned as to the origin of their sickness, some would answer, "I felt cold all over;" some, "I caught cold;" while others would say, "I got an awful trembling and shaking;" this sensation of cold, from slight chilliness to distinct rigors, was of short duration, and generally preceded the headache, which also assumed every gradation of severity at its onset; but, happily, did not continue so for a longer time than one or two days, giving place at the end of that time to a feeling of dizziness and uneasiness—especially when the patient occupied the sitting posture; but, when in the recumbent, no inconvenience was ordinarily felt from cerebral symptoms.

Either accompanying, or quickly following the chill and headache, were pains in the back and extremities, acceleration of the pulse, furred tongue, anorexia, thirst, constipation, mental stupor, and almost always loss of strength; then the eruption by the fifth or sixth day; and if the patient is to recover, convalescence takes place in about a week after.

The headache, however, does not always subside in the manner described, but occasionally becomes more and more aggravating, such patients being almost always very anxious, and frequently asking whether they are expected to die or not. My experience has taught me to dread these cases; for, from this morbid anxiety, they are apt to pass into an active delirium, requiring force to keep them in bed, refusing to take their food and stimulants; and in this condition they soon succumb, either from asthenia or in a comatose condition. I greatly prefer to have my patient go into typhus fever, dull, stupid, and indifferent, than to have him anxious and deeply concerned as to the issue of his case.

The pulse is generally accelerated in proportion to the gravity of the disease; so that, as long as it remains below a hundred beats in the minute, you will feel no immediate anxiety. Indeed, a pulse at from 100 to 112 is a good fever pulse, and, unless the other symptoms are out of proportion

to this, you may treat the case with the most encouraging prospects; but when the pulse rises above 112, the patient must be watched very carefully; it was almost an every-day occurrence to find some patients in the ward who had arrived at the acme of the disease, with a pulse from 120 to 130, and then pass into convalescence; but, always, a patient with over 120 cardiac impulses per minute, was an object of much solicitude. The most frequent pulse noted in any case which recovered was 140 per minute, while many recovered from a pulse of 136. The rule above stated, that the frequency of the pulse denotes the severity of the disease, is by no means invariable, for it sometimes happens that you will find a slow pulse throughout the disease, while the other symptoms are of the gravest character, such as a dark, dry, and fissured tongue, sordes on the teeth and gums, subsultus tendinum, great stupor, etc. This, or any other incongruity in the symptoms, is usually regarded as inauspicious; notwithstanding which, three of our ninety-three cases had this pulse anomaly and recovered.

There are other characters of the pulse which deserve attention, such as the irregular and intermitting. When a patient, starting out with a regular pulse, is overtaken with either of these varieties, the general rule is that he will die; for, associated with this irregularity of the heart's action, will be symptoms of the most serious nature, which soon precipitate the fatal issue. But, in our service, we had two cases in both of which an irregular and intermitting pulse was present for several days, and this symptom followed by convalescence. In one fatal case the pulse was bisferiens, the undulations being distinctly recognisable the moment the artery was felt. In nearly every case of severity, and especially when prostration was a prominent feature, the first sound of the heart was diminished in intensity, and sometimes very indistinctly audible.

After the pulse, the next most important and uniformly available guide in the case, is the condition of the tongue. At the commencement it is more or less furred, but moist; as the disease becomes more developed the tongue becomes less and less moist, until at length, according to the gravity of the case, it will have passed through the successive gradations of dry, dry and brown, very dry and dark, fissured, and bleeding. In the latter condition it is with difficulty protruded, the patient making several efforts before he is able to command the organ, and then it often is but partially thrust out with a tremulous motion, and now the same difficulty is experienced in withdrawing it. The appearance of the tongue, which is so useful to indicate the advance of the disease, may be as valuable in marking its recession; for, when after it has been dry and brown for any length of time, the edges begin to moisten, you may accept this as one of the most trustworthy harbingers of convalescence.

Constipation is the rule in typhus, though many of our patients had looseness of the bowels, but never any tympanitis; and it was often a question whether this moderate diarrhoea was spontaneous or the effect of the beef tea, which is well known to produce a laxative effect upon the bowels.

From the beginning the nervous system appears to be unstrung, or in a state of partial collapse, as indicated by the concomitant mental inactivity and muscular prostration, which advance together with the disease, and retract in the same order when the fever is broken and convalescence is established; all the special senses are liable to become perverted and benumbed, and more or less aberration of the mind exhibits itself generally in a delirium of a low grade of activity, the patient fancying himself engaged in his accustomed avocations, in conversation with his friends, or, as often happens, will talk incoherently. Moreover, the delirium is characterized by a peculiar sobriety or melancholy, so that it is exceedingly rare to see the patient smile during the graver periods of the disease; and when we are able to excite a smile, it is hailed with delight as one of the valuable precursors of approaching recovery. In one of our ninety-three cases, a patient, naturally reserved and taciturn when in health, was affected throughout the disease with a

joking diathesis. He would not only say comical things spontaneously, but would hit upon clinical questions asked him by his physician, as the occasion for some of his witticisms.

The muscular prostration is indicated by the decubitus of the patient, which is pretty generally dorsal, so that you will, on approaching the bedside of a newly admitted patient, be tolerably safe in concluding him comfortably sick should you observe him lying upon his side.

The eruption, as a rule, made its appearance within the first week after the commencement of the headache, chills, etc.; in two cases, transferred from a general medical ward, it appeared respectively in three and a half, and four and a half days; it was the most copious upon the abdomen and upper part of the thighs, but spread from these parts with varying degrees of extent; so that, in no inconsiderable number of cases, the entire surface of the body—the hands and face excepted—was completely maculated with the peculiar mahogany non-disappearing eruption.

In one case a patient was affected with a double parotid swelling, appearing first in the left gland, producing in one night a hard, brawny tumor, which was tense and shining; and in two days the other side was similarly affected, so that now the patient presented a most hideous aspect. The parts were poulticed to facilitate the expected suppuration; but, contrary to the rule, the swelling on both sides gradually subsided, and resolution was completed within a week after the appearance of the first swelling. During the summer of 1862 I saw in the General Hospital, Army of the Mississippi, near Corinth, about one hundred and fifty cases of typho-malarial fever, and the parotid abscess occurred in about ten per cent. of these patients, and was double in about five per cent.; they almost invariably suppurated if the patient lived long enough, for they were regarded as a very grave complication, and indicative of an unfavorable termination. Those patients who recovered from fever with parotid abscesses were very slow in regaining strength, and the discharge from the gland was kept up for a long time. In one only of the ninety-three cases did any secondary abscesses form during convalescence, and this patient was a man of good constitution and habits. As he began to improve, two abscesses developed themselves, one in the posterior fissure of the nates, and the other in the upper and inner aspect of the thigh; they discharged and healed without difficulty.

But by far the most interesting thing noticed in connexion with these ninety-three cases, was the presence of albumen and casts in the urine. During the earlier part of my service in the fever ward, I was induced to examine the urine of some patients who were then very sick, and was not greatly surprised to find that in many of these cases albumen was present in quantities varying from a slight trace to absolute solidification; for this observation had been made before—that is, every now and then a patient would be found sick of fever whose renal excretion gave evidence of the presence of albumen; and this albuminuria was supposed to render the prognosis exceedingly grave. Owing to the developments made by these early investigations, I continued to test the urine of my graver cases from time to time, and from the very frequent occurrence of albumen, began to think that it deserved more attention as a symptom or complication than had usually been accredited to it, and accordingly resolved to study its natural history as associated with typhus fever. Thereupon a specimen of the urine of each patient was tested daily with heat and nitric acid, from the date of his admission till death, or an advanced convalescence resulted; and, from a steady pursuance of this practice to the end of my fever service, I am enabled to state that the urine of nearly every severe case contained albumen for a longer or shorter period, corresponding to the acme of the disease. And by a severe case is meant, when the pulse rises to 120 beats per minute, with dark dry tongue, subsultus tendinum, etc. The albumen would commonly manifest itself as follows: while the disease was in its incipient stages, and yet advancing, its presence was exceedingly

rare; if the attack proved a mild one, and the pulse remained below 112, no albumen would be found throughout the disease; but when the pulse became as rapid as above mentioned, 120 per minute, with symptoms of corresponding gravity, albumen would begin to appear in small quantities at first, increasing *pari passu* with the disease, and diminishing as soon as the crisis was passed; so that, when convalescence was fairly established, the albumen would entirely disappear, and never in any case was found again while the patient remained in the hospital. Nearly every fatal case had albumen in the urine after the symptoms became alarming; but casts were also discovered in this albuminous urine. Hitherto the presence of casts in the urine of a person sick of fever, sealed the prognosis and doomed the patient, as he was supposed to be laboring under some of the incurable organic lesions known under the head of Bright's disease. Doubtless the vast majority of those affected with antecedent and confirmed Bright's disease would succumb to an attack of typhus-fever; but that all, or a large proportion of those sick of typhus, in whose renal excretion casts are found, will die of the attack, is a proposition too comprehensive and too thoroughly disproved to be again credited. In our cases the appearance, continuance, and final disappearance of the casts seemed to be governed by about the same laws which regulated the albumen in these respects, with this exception: that the albumen almost constantly preceded the casts by a day or two, and the casts in turn would be found, by prolonged examination, for a few days after the disappearance of the albumen.

The casts were of the granular variety, of large size, and were found in every case that died, and in all such severe cases as contained albumen beyond a mere trace; and these casts entirely disappeared as the patient began to recover, and in no case were known to reappear, although the urine was patiently examined with the microscope for weeks after in many cases, and in all, till health was so thoroughly re-established as to demand the discharge of the patient.

These facts, in relation to albumen and casts in typhus fever, are entirely novel to me, as I am unable to find any published account of either occurring so frequently as above described. That these patients had organic disease of the kidney before the attack of fever was morally impossible, for in no case were casts and albumen present during the earlier stages of the disease, and in none could the history of previous Bright's disease be traced; moreover, the well developed muscular system, the thickened cuticle of the hand, and the bronzed hue of the face, presented by many, unmistakably evidenced a degree of vigor and physical endurance thoroughly incompatible with the existence of Bright's disease; add to this the recovery and subsequent good health of the patient, and the evidence is demonstrative.

In the present state of our knowledge of renal pathology, albumen and casts are supposed to indicate structural changes in the kidney. Why may not typhus fever produce an acute Bright's disease as well as scarlatina? why may not a condition, analogous to that described by Dr. Johnson as acute desquamative nephritis, obtain in this disease? Dr. Johnson supposes that the causation of the lesions sustained by the kidneys during and after scarlet-fever, exists in the extra labor of eliminating the *materies morbi* which they are called upon to perform vicariously for the skin when its excretory functions are impaired.

In the critical stages of typhus, the struggling system is seeking to rid itself of the fever poison, and all the excretory organs are probably brought into requisition; but now the bowels are slow, the skin either hot and dry, or sluggish and atonic; at best its functions are partially suspended; in this condition the kidney is called upon, as in scarlet fever, to relieve the oppressed organism, and, in its benevolent exertions at exorcising this subtle typhus agent, becomes itself diseased, as shown by the casts and albumen in its excretion.

The treatment of most of these cases was novel in this hospital, so far as relates to the medicinal part of it; but before

entering upon this, we will say a few words in relation to the general treatment. Free ventilation was insisted upon as the *sine qua non*, together with perfect cleanliness of the body and bed-clothes; next food, at once nutritious and easy of digestion, such as eggs, milk, and beef-tea—which were the only articles upon which we depended—and of these, eggs and milk are by far the more reliable in cases requiring much support by alimentation; the eggs were found to agree best with the taste and stomach, when their albumen was slightly coagulated by boiling, and the milk was generally given with whiskey. Stimulants were administered in doses graduated to the severity of the case; many patients required but very little, and a few not any at all, while others took whiskey in large quantities: twenty-four ounces per diem was not an unusual allowance. The largest quantity given daily to any patient that recovered was thirty-six ounces; in short, alimentation and stimulation constituted the whole treatment aside from the special medication to which allusion has already been made. And this consisted in the employment of the acid plan so much advocated by Dr. Chambers of London. Dr. Chambers gives dilute muriatic acid with the idea of combating the "sub-acidity" of the blood, which is caused by the great increase of the destructive metamorphosis of the tissues, giving rise (according to Dr. Richardson) to a condition of "super-alkalinity" of the blood. Of this treatment Dr. Chambers says: "The draught is usually approved of even for its taste, but is still more approved of even for its beneficial effects. I have now used it in every case of low fever for four years, and have not lost one of those patients who have taken it for thirty-six hours." Although unable to report such absolute success as this, still we are forced to the conclusion that the mortality among our fever patients was very materially diminished by the exhibition of the acid after the manner proposed by Dr. Chambers, except that, instead of muriatic, we gave sulphuric acid. Our prescription was as follows: *R.* Acid. sulph. dil. ʒ xi.; syr. aurantii, aquæ aa ʒ viij.; mix a tablespoonful every two hours. The patients relished the mixture; and, in order to arrive at a proximate appreciation of its therapeutical agency, the following facts have been collated. It is proper to state, before proceeding further, that all of the cases which we admit into the following account are those which remain after the elimination of all such as died within forty-eight hours after admission (for which we are not responsible), together with those immediately transferred to other wards, the diagnosis of fever being disproved. After such elimination, there were treated in the male fever-ward, from January 1st to July 1st, 1863, seventy cases of fever, fourteen of whom died, or twenty per cent.; none of these patients had any acid, but were treated in the usual way by food and stimulants.

From July 1st, 1863, to January 1st, 1864, there were treated in the same ward ninety-three cases of fever; of these eleven died, or 11.82 per cent. Fifteen of these ninety-three cases occurring during the month of July, were treated in the same manner as the seventy patients already mentioned. Three cases out of these fifteen died, or twenty per cent., being the same ratio of mortality as occurred in the seventy patients. The remaining seventy-eight patients took, in addition, to the food and stimulants, the sulphuric acid as above prescribed, and of this number but eight died, or 10.25 per cent.

Now, the type of the fifteen cases which were treated during the month of July, was in no respect different from that which obtained in the seventy-eight cases immediately preceding; and, with the exception of the acid, the treatment was precisely the same in both; the nursing being attended to by the same Orderly, whose efficient and intelligent exertions will be gratefully remembered by many patients.

The seventy cases occurring during the six months preceding July, 1863, although not seen by us, were, according to reliable authority, about the same in character as the ninety-three which followed; they were certainly no graver.

Here, then, is an aggregate of one hundred and sixty-three cases; eighty-five being treated with food and stimulants without any acid, with a loss of twenty per cent., and the remaining twenty-eight with food and stimulus, but with the addition of about nineteen minims of dilute sulphuric acid every two hours, with a mortality of 10.25 per cent., being a difference of 9.75 per cent. After what has already been said of the type and treatment of these one hundred and sixty-three cases, we will leave the reader with the facts to make his own deductions as to the relative efficiency of the two methods of treatment.

In conclusion, we will make a few remarks upon the contagiousness of typhus fever, and the effects of fever among medical men. It is well known to the readers of the AMERICAN MEDICAL TIMES, that Dr. A. Loomis was appointed by the New York Academy of Medicine, as a committee to investigate the origin of the present epidemic of typhus fever in New York city; and that he reported his success in tracing it to a little girl in Mulberry street, recently landed from an emigrant vessel, sick of typhus fever; and that it was communicated from her to other families within the same tenement, and from this house to others adjacent; and from this vicinity was transported to various parts of the city; thus confirming the doctrine held among us, that typhus fever is never indigenous in this country; never springs up *de novo*, but always, when occurring here, is shipped from some foreign, usually British port. Were other evidences needed of the contagious nature of typhus, they might be furnished in the fact, that often within this hospital we have not only several members of the same family sick of fever, but trustworthy accounts of its having been given to them by some friend, sick of fever, who came to their house to stay during his illness; and since the fever has prevailed to any considerable extent, and the fever wards of Bellevue Hospital have been filled with patients, the building has become a propagator of the poison, so that within one year nearly one hundred cases of fever have originated within the hospital.

Within the past year ten members of the resident hospital staff have had fever, and of these five have died, or fifty per cent.; besides these, another medical gentlemen whose duties required his daily attendance at the hospital for several hours, also contracted the disease and died; so that the mortality among medical men has been fearful, which corresponds to previous experience.

BELLEVUE HOSPITAL, Jan. 29, 1864.

THE EXAMINATION OF RECRUITS;

OR HINTS ON THE DUTIES OF AN "EXAMINING SURGEON."

By JAMES BRYAN, SURGEON, U.S.V.

"But when they would seem soldiers, they have galls,
Good arms, strong joints, true swords; and Jove's accord,
Nothing so full of heart."

SHAKESPEARE.

It has been my practice during the present war to record a few notes or hints on each branch of the medical service, as I saw it in my own experience; and, in accordance with this habit, I proceed to say a few words on the important duties of an "Examining Surgeon for Volunteer Recruits." Without this examination, according to the regulations, no private soldier or non-commissioned officer can enter the army of the United States. The surgeon's signature is generally considered of sufficient authority to "pass" a man into the service; yet the "regulations" call for the presence of the mustering officer at this examination, and I have been in the habit of insisting upon having a commissioned officer always present on the occasion. There is a strong disposition, while holding the surgeon responsible for all errors and mistakes, to leave the matter entirely in his hands. This should not be. For the protection of the service and of the surgeon, the regulations should be rigidly complied with.

There are two conditions under which a surgeon may be

called upon to examine men for the service. The first is that in which (whether associated with bounties or not) men offer themselves, or are offered as volunteers.

Secondly, He examines men who are drafted, and decides whether they are qualified, physically, intellectually, and morally, or not, to perform the duties of private soldiers. In the first case, at the present time, when the bounties from different sources are so large, it is decidedly to the interest of the volunteer, or of his *friends*, that he should pass the inspection of the surgeon. In the second case no bounties are offered nor received, and a certain percentage of persons from all classes of society, provided they pass this inspection, are liable to be sent to the army to perform military duty.

The wishes and interests of this class are frequently opposed to the wishes of the Government, and every impediment will be thrown in the way of the surgeon to prevent his verdict in favor of their soundness; the surgeon consequently has to guard himself against imposition in the way of feigned diseases. Of this part of his duty I shall not speak further on the present occasion. In reference to his duties with the first class, the friends of the recruit, or the recruit himself, will, in order to secure the bounty, attempt to impose upon the surgeon in various ways, one of the most common of which is, pretending to be younger than he is. To do this it is not uncommon to have his hair, whiskers, and mustaches dyed; to wear artificial teeth, an artificial eye; to conceal a halt or lameness, by walking upright, and to exhibit a flexibility and mobility of his limbs generally, which are forced and unnatural. The assistance of alcohol is often invoked to carry out the deception. On the other hand, boys who are evidently not more than fourteen or fifteen years of age, will affirm that they are eighteen or nineteen. I have known boys to be dressed in men's clothes to make them appear older. Strong efforts sometimes are made to conceal a partial paralysis of an arm, a leg, or both. When a candidate is excessively modest, and objects pertinaciously to the exposure of his person, I have learned to suspect the presence of a hernia, a hydrocele, or some other affection in the region of the genital organs. Even varicose and other chronic ulcers of the legs are found concealed by the clothing. Some of them try to hide their defects by rapid motions of their limbs or body, in this way deceiving the eye of the surgeon. The repeated assertion before an examination, either by the man himself or his friends, that he is perfectly "sound," should always be taken "*cum grano salis*." A blind eye will sometimes be dexterously shaded by a lock of hair, and many other defects may be thrown into the shade by a dexterous position of the body.

MODE OF EXAMINING A RECRUIT.

1st. Have him entirely undressed, leaving not a particle of clothing on his person; let him stand before, and facing the surgeon, at a distance of from three to five feet, with the light shining upon his face and the front part of his body. Let him stretch both hands and arms out before him, opening and shutting his hands to their fullest extent; then let him flex his fore-arms upon his arms, and extend them again; then let him raise his hands and arms over his head, striking the backs or palms together. Let him grin, and open his mouth to show his teeth. Let him cough repeatedly and strongly, while the surgeon carefully examines the inguinal regions. Let him bend his legs upon his thighs, one after the other; let him then turn his back to the surgeon, bending his head and body downwards, till his hands touch the floor; let him then stand up, and walk off some fifteen or twenty feet. Turning his face to the surgeon again, and standing still, the surgeon presents to his eye a playing card, and asks him to tell at that distance the number of spots on the card; if he answers correctly, the attending officer then covers the left eye of the recruit, while the surgeon changes the card, and asks the same question as before; a handbill or other paper containing letters of different sizes will answer the double purpose of test-

ing the sight and ability to read. Occasionally various gymnastic exercises, as running, jumping, or going through the manual with the musket, will be necessary, to determine the strength and agility of the man.

DISEASES MET WITH IN A RECRUITING OFFICE.

Those of the eye, which we have met with, are, corneal opacity, corneal specks, contracted pupil, cataract, amaurosis, irregular pupil, strabismus, collapse of the eye, total loss of the ball, and excessive myopia. It is necessary always that the right eye be a good one. Deafness, with chronic discharges from both ears; loss of teeth, particularly in the upper jaw; torticollis, curvature of the spine, with consequent malformation of the chest, with or without tuberculosis; abdominal dropsy; consumption, and diseases of the heart; stillicidium urinæ; all forms of inguinal and scrotal herniæ; one case of undescended testicle, varicocele, hydrocele, and sarcocele; hæmorrhoids, and prolapsus ani; varices of the thighs and legs; chronic ulcers of the latter, of all varieties, specific and other; sub-luxation of the shoulder-joint; partial ankylosis of the elbow-joints; luxations of the upper end of the radius. The loss of one or more fingers, also of the thumb; femoral fistula not involving the joints; stiffness and ankylosis of the knee-joints; do. do. of the ankle-joints; elephantiasis of the thigh; loss of all the toes of both feet by frost; bunions, over-lappings, and other deformities of the toes.

The condition of the mental and moral faculties is sometimes difficult to determine. The great prevalence of alcoholic inebriation, with its stupifying effects, makes it peculiarly so. The minimum height to which the recruiting officer is restricted by the Regulations in his selection of men for the service, is five feet three inches, but we sometimes find persons who are otherwise strong and vigorous who do not come up even to this standard. The requisition, "competent knowledge of the English language," must be rendered by a free translation, in many cases where the German, French, or any foreign language is the only one spoken by a recruit. According to the Regulations, all recruits are subject, after leaving the rendezvous and before final acceptance, to a second examination. This is doubtless for the purpose of correcting any mistakes which may have been made by the recruiting officers. Sufficient time is thus allowed to intervene for the exposure of deceptions, and for the development and more perfect observation of concealed diseases. As this is a regular procedure, to meet these unavoidable difficulties, no special blame should fall upon the recruiting officers, when these unintentional accidents are thus exposed and corrected. It is only when the number and character of the cases present indubitable evidence of carelessness or neglect on the part of these officers, that anything like punishment should be inflicted upon them. They are supposed to be loyal men and gentlemen, have taken the oath to support the Government, and are not interested in sending worthless men to defend it. I will close my remarks on this subject, by recommending my fellow officers to follow strictly the Regulations, and the various "orders" from head-quarters. And whenever a difficult or doubtful case occurs, to call in the aid of other officers, and in *all* cases decide for the interest of the Government.

I may mention, in passing, that some of the finest physical forms that I have examined, have been those of the negroes. They are, moreover, less afflicted with hernia and several other diseases than are the whites. They appear to be almost free from scabies and other affections of the skin, so common among the white brethren. These facts have reference only to the pure black, and not to the mulatto.

At the suggestion of Surgeon-General HAMMOND, the question was agitated in Congress to restrict the period of enlistment to the ages of 20 to 45. The practice at present, however, substitutes the 18th for the 20th year; and the recruiting officer is daily importuned by boys of sixteen and seventeen, to be admitted to the Army on the assertion, and even oath, that they are eighteen years of age.

141 MONTAGUE-STREET, Brooklyn, N. Y.

EPILEPSY OF THE RETINA, AND ITS CONNEXION WITH GLAUCOMA.

By JULIUS HOMBERGER, M.D.

(Continued from page 75.)

The circumstance of the absence of intra-ocular pressure, as stated by Dr. G., does not speak against such a supposition as Coccus* (and also cases of my own) strongly argue against the invariable existence of intra-ocular pressure in some cases of simple glaucoma, and as, besides, the palpation of the bulb as hitherto practised, is so imperfect a means of physical diagnosis, that its results cannot be considered as very reliable, and certainly not as infallible.

It was my intention to give in the above, some cases which seem to me analogous as to their pathogenesis, and which seem to justify my attempt to combine epilepsy and glaucoma as kindred diseases, produced by identical, or kindred nervous influences. These influences seem to be the *causa proxima* of an irritation of the vaso-motory nerves, producing contraction of the vessels of the brain in epilepsy, contraction of the vessels of the optic nerve in glaucoma. Epilepsy might be called the glaucoma of the brain, glaucoma the epilepsy of the retina.

If we consider the comparative emptiness of the retinal vessels as the consequence of nervous irritation, and as the cause of the defect of vision, which may also be produced by mechanical pressure on the eyeball; if we suppose that in glaucoma simplex, the defect of vision disappears as soon as the temporary nervous irritation of the vaso-motory nerves ceases, in the same way as vision returns as soon as the pressing finger is removed from the normal eye subjected to the above quoted experiment of Donders and Moll; if we regard the increase of intra-ocular pressure in inflammatory glaucoma as the consequence of an increased secretion of the humors of the eye, produced by the relative vacuum in the vessels, in the same way as we produce such a partial vacuum for therapeutical purposes by the artificial teeth, I believe we have satisfactory combination of the hitherto recondite links of that chain of symptoms which has been called glaucoma.

Furthermore, it seems certain that the more rapid and the more considerable the contraction of the vessels are, the more violent must be the secretory functions of the secretory membranes. The choroid and ciliary body respond by a slight increase of secretion to a slight decrease of the blood in the retinal vessels, while, if the decrease of blood in the latter is considerable (which is identical with a powerful irritation), and if the contraction produced by the irritation is lasting, a resorption of the hypersecretion and osmotic exchange becomes more and more difficult or impossible. Then the symptoms of inflammation and high intra-ocular pressure set in, giving to the disease the character of inflammatory glaucoma. I am well aware that some of the opinions which I put before my readers may soon prove untenable, and that many conclusions may not be true. On the other hand I think that others may know better than myself to derive truth from various points which serve as the base of my arguments. I did not wish to delay the publication of this article, because it cannot fail to remind many physicians of cases, like those quoted, and my own, of epilepsy of the retina, and to elicit the record of their observations. I am of the opinion that the discovery of the cause of contraction of the blood-vessels in epilepsy will be identical with the discovery of the first cause of glaucoma, and vice-versa.

Finally, I solicit for my remarks the attention of both physicians and ophthalmologists, and crave their indulgence if scientific zeal should have carried me too far into barren fields of speculation.

* See Archives of Ophthalmology, Vol. IX Part I, page 6. The words of Coccus are: "The tension which undoubtedly exists in many cases of simple glaucoma is in others so slight, particularly in the commencement of the disease, that it has not sufficed to satisfy me that tension is the fundamental symptom in glaucoma simplex, as Donders thinks."

REPORT OF A CASE OF DIPHTHERIA. AUTOPSY.

By P. C. GARVIN, ASST.-SURG. 40TH MASS.

PRIVATE W—R—, Co. F, 40th Massachusetts Vols., was admitted to Hospital December 31, 1863. He had high fever, fetid breath; tongue coated with yellowish thick fur; great swelling of tonsils, with ash-colored patches upon each.

The patient was very much alarmed, several deaths having occurred in the regiment from diphtheria. His throat was sponged with arg. nit. \mathfrak{D} ii., aq. \mathfrak{Z} i., and the following prescription was administered:—R. Quiniae \mathfrak{z} i., Op. caps., aa. gr. vi. M. Ft. pulv. in ch. vi. div. S. One every four hours. This treatment was continued with apparent benefit to the patient until January 4, when he was found to have more fever, was more stupid, and in reply to the question: "How do you feel?" answered, "I'm better," immediately relapsing into sleep. In addition to the above treatment, mag. sulph. \mathfrak{z} ii. was administered every four hours, to relieve constipation; increasing fetor of breath was corrected by garg. potass. chl. Jan. 5.—The disease assumed a typhoid character, and the patient had a low, muttering delirium. The throat appeared dusky upon the inside, and a livid hue extended over the countenance. The patient declared himself better, had considerable coma, but was easily roused. During the afternoon there was rapid increase of lividity; pulse 120 to 130, with great increase of mucus in the throat. He was unable to expectorate at six P.M., and died an hour later.

Autopsy was performed by Surgeons Smith and Garvin at ten A.M. of the sixth. Rigor mortis well marked; there were recent adhesions upon the left side; grey hepatization; a dark mottled appearance of the lungs; and at the base of the right lobe were black patches, also one upon the anterior edge of the middle lobe. A false membrane (thin and ash-colored) commenced high up in the trachea, and increasing in thickness as it descended, completely filled the right bronchus, rendering that lung entirely useless; here the exudation was mingled with matter of a muco-purulent character, which with forceps could be drawn out in long shreds. In the left bronchus the membrane was firmer, being of the thickness of filtering paper, and, when removed, retained to some degree the tubular form; the trachea was intensely inflamed; the heart normal.

says: "My mode of application has been to secure a piece of ice, the size of a hen's egg, so shaped as to adapt itself to the form of the neck, upon each side of the larynx, or as near the seat of inflammation as practicable; and for tonsillitis, immediately to the sub-maxillary region, upon one or both sides, as the case might require. I have generally adjusted the ice by enveloping it in a single thickness of oiled silk, so that it could not slip from its proper place, then, placing it saddlewise over the larynx, I next envelop the whole neck with several thicknesses of flannel, with the view of preventing the temperature of the surrounding air from contributing to any extent in dissolving it. When the ice seems to be no longer required, the moderate application of cold water will prevent too great reaction, and the lighting up anew of the morbid action." This treatment is not solely relied upon to the exclusion of other remedies, but is considered a valuable auxiliary to such other medication as the circumstances of any particular case seem to demand."

American Medical Times.

SATURDAY, FEBRUARY 20, 1864.

A NEW DISEASE.

DURING the past week an instance of the poisoning of a whole family, and the death of one member caused by eating a ham, was reported in the city papers. The case was investigated by DR. SCHNETTER, who found the ham full of the "trichina spiralis," and did not hesitate to attribute the poisoning to this parasite.

Considerable attention has recently been attracted to the habits of the trichina spiralis, and the diseases arising from its diffusion in the human system. The trichinae have long been known to exist in the muscles of hogs, coiled in a spiral form, and inclosed in chalky capsules. In 1835 PROF. OWEN first distinguished them in the human body. The speckled condition of human muscle previously noticed, was found to be due to "white specks in the muscles, and seem to be cysts of an elliptical figure, with the extremities in general alternated, elongated, or more opaque than the body (or intermediate part) of the cyst, which is in general sufficiently transparent to show that it contains a minute coiled-up worm." Subsequent observers have described this worm more minutely, and from their researches it appears that "the fully developed trichina is a distinct filiform worm, occupying the alimentary canal, and giving birth to young trichinae, which pierce the walls of the intestines, and, on reaching the muscles, become capsulated." According to LEUCKAERT, the trichina, which he regards as a nematoid in an early stage, attains sexual maturity two days after its entry into the alimentary canal. The young pierce the intestinal wall, and, guided by the intermuscular connective tissue, reach the interior of the muscular fasciculus, where they attain their full size within a fortnight. The muscular fibres become granular, and when the creature is full grown, the sarcolemma becomes condensed. VIRCHOW, in his experiments upon rabbits, never found the trichinae in the brain, heart, lungs, liver, kidney, or blood.

It is now well established that the development of this worm in the human subject is due to the ingestion of pork which contains the animal or its embryones. In very

Progress of Medical Science.

COLD APPLICATIONS TO THE THROAT.—To prove that this practice is not new, the Editor of the *Canada Lancet* quotes from the literature of the subject as far back as Mason Good, where we learn that as long ago as 1822 croup was treated with cold applications. The same has been recommended by various writers at different periods to the present time. The editor says that his own experience in the use of cold applications to the throat for croup is decidedly favorable; in no instance have they failed to produce a marked good effect on the breathing. He now constantly orders pieces of ice to be held in the mouth, and the cold water to be swallowed in all inflammatory affections of the throat.

The same number of the *Lancet* contains a letter from M. M. Taylor, Surgeon U.S.V., to Prof. N. P. Davis, of Chicago, in which the writer states that for the last four or five years his practice has been to apply ice to the throat externally in the treatment of inflammatory and spasmodic croup, diphtheria, tonsillitis, laryngitis, œdema of the glottis, and, indeed, all inflammatory affections of the throat not connected with the eruptive fevers. It exerts a powerful sedative effect, both general and local, and though it may not arrest, it always modifies the morbid action. He

many cases the disease has been directly traced to the feeding upon pork which has been found to contain the trichinæ. They have also been developed in the rabbit by introducing them into the stomach. GAMGEE has recently written on this subject, and notices the fact that parasites abound in the domestic hog, and are especially abundant in the swine of Ireland. TURNER thinks this parasite is more frequent in man than is generally believed; he found it in between one and two per cent. of the bodies in the dissecting room. The disease which the trichina produces in man is due to its development and wandering to distant points. The disease resembles typhus fever, and is often, doubtless, mistaken for it. It is not confined always to a single individual, but may assume all the characters of an epidemic. DR. MUELLER, of Homburg, Germany, states that "in Hettstaedt, a small town of Prussia, containing about 5,000 or 6,000 inhabitants, a veritable epidemical propagation of trichinæ commenced in the middle of October last, in consequence of the infected person having eaten a kind of sausage (not thoroughly cooked) made of pork in which were trichinæ."

The symptoms of the disease during this epidemic are thus given by DR. MUELLER:—

"According to the information I obtained on the spot, the disease begins a few days after eating the meat in which there were trichinæ, with loss of appetite, and almost without exception with diarrhœa and fever; œdema of the eyelids; also pain, or at least painful sensation of weakness, in the limbs; œdema of the joints; difficulty in moving the tongue; profuse clammy perspiration: and those patients who do not become convalescent, die either unconscious with symptoms of typhus fever, or, in a few cases, remain conscious to the end, complaining of inability to breathe freely. The only important symptom of typhus absent in the disease is the enlargement of the spleen, and it is very probable that some of the so-called epidemics of typhus fever in former days were caused by the propagation of trichinæ in the human body."

Other writers speak also of excessive and singular muscular pains generally through the body, but especially in the calves of the legs, which become hard and swollen. TUNGE thus describes a case occurring in a sailor:—

"The patient suffered from diarrhœa, with pain in the abdomen. To these symptoms were subsequently added loss of appetite, headache, and violent pains in the limbs, especially in the legs. The skin was hot and perspiring; the face red; the pulse very frequent; the legs, especially the calves, seemed rather tense; the skin generally was very tender on pressure. At a later date, disturbance of consciousness set in; the features became collapsed; there were frequent involuntary alvine evacuations; the breathing became laborious; the cutaneous teaderness continued. As the loss of consciousness and the collapse increased, the temperature and the frequency of the pulse fell; the voice became weak and somewhat hoarse. The patient died in a state of unconsciousness."

The diagnosis of this disease may be positively made out during life by harpooning the muscles and examining the portion removed under the microscope. FRIEDREICH thus speaks of a case diagnosed during life:—"The muscles (calves of the legs) were harpooned several times. The first time was about twenty or twenty-one days after the commencement of the attack: although a piece of muscle only about the size of a hemp-seed was taken out, no less than seven trichinæ were found. Ten days later other harpooning showed no trichinæ; but seven days after this a living, but not encapsuled trichina was found; and four

days after this an encapsuled worm was discovered. Seventeen days later, when the patient was quite well, the search for trichinæ was fruitless. The muscular fibres were not inflamed, but were fattily degenerating rapidly. A very extraordinary discovery was that a trichina was found in the pus of one of the boils, so that Friedreich asserts that the furunculoid disease was caused also by a wandering of the worm beyond its usual site. The patient had been engaged in killing pigs the week before his illness, and had often held his bloody knife in his mouth, and had also eaten raw some of the bits intended for sausages."

The "trichina disease" often proves fatal. It may terminate fatally with immediate and severe symptoms, as in the case occurring in this city. LANGENBECK relates an instance where a commission composed of eight persons were served with a collation composed of ham, sausages, cheese, roast veal, and white wine. Seven partook of the food, all of whom were soon after seized with intense diarrhœa, pain in the neck, and œdema of the face and extremities. In four the attack proved fatal, and the others had a lingering convalescence. Several years after LANGENBECK operated upon one of the survivors, and found that his muscles contained an immense number of dead trichinæ in calcified capsules. It terminates fatally in ordinary cases in about the same ratio as typhus or typhoid fever. During the epidemic at Hettstaedt eighty persons were attacked, of whom about twenty died. The mode of dying is not unlike that of fever; peritonitis and paralysis are also frequent results.

THE PROGRESS OF THE AMBULANCE BILL.

It is with the liveliest gratification that we notice that the Ambulance Bill, introduced into the U. S. Senate by MR. WILSON, has passed that body. In its main features the measure is the same as that introduced into practice in the Army of the Potomac by DR. LETTERMAN, Medical Director. It is painful to reflect how much misery such a system would have saved had it early been adopted by Government. But we are making slow progress, and must be thankful that even after so long a time our legislators recognise the claims of humanity, and yield to the imperative demands of the people. The thanks of the nation are due to those who have so untiringly urged this measure upon the attention of Congress until they have finally triumphed. Especially should the labors of DR. BOWDREN, of Boston, be remembered and rewarded; to him more than any other single individual is due the credit of securing the passage of this act. Our Boston contemporary is needlessly sensitive, however, in its assertion of the claims of the profession of that city to the paternity of this measure. We have no disposition to detract in the slightest degree from the merit of the medical men of Boston who have so perseveringly prosecuted this humane enterprise. We have had reason to believe that there was not that degree of concert of action between the profession of Boston and the friends of an Ambulance system elsewhere that was desirable, in order to secure the passage of an act. Happily, however, there has been entire harmony, and the result will be the inauguration of this important branch of service in all the armies of the United States.

THE HAMMOND COURT-MARTIAL.

This trial is slowly proceeding, and all the evidence on the part of the prosecution has been brought forward. The

defence will occupy a month or more, as there are upwards of forty witnesses to be examined. Meanwhile we have in the following extract from the leading London journal, the impression which this trial produces upon intelligent foreign readers:

"Some time since (*Medical Times and Gazette*, October 17) we noticed the remarkable circumstance, that Dr. Hammond, the Surgeon-General of the United States Army, in the very midst of a most successful career of enlightened administration, which was obtaining for him the highest public and professional approbation, had been removed from his scene of usefulness, and despatched to a distant region upon a comparatively unimportant mission. This seemed at the time quite unintelligible; and, although a motive has since been assigned, we are still unable to understand how, in a country professing a love for justice and fair play, it has been allowed to operate so mischievous a procedure. It appears that, in the course of the reforms he has had to institute, Dr. Hammond has found it necessary to rout out more than one nest of jobbers in public calamity, and has had the courage to execute his duties in face of great difficulties. Those whose interests he has thus interfered with seem to have possessed power enough to obtain his relegation from the proper field of his duties, and the appointment of a secret commission to investigate in his absence charges made against his management of his department. This inquisitorial procedure has naturally aroused the indignation of the Profession, especially as this is only one of many acts exhibiting a disposition to interfere with, and trammel, the legitimate action of the Medical Department, to which the army owes so much."

A STATE BOARD OF EXAMINERS.

THE project of a State Board of Examiners for the degree of Doctor of Medicine has been revived by the Medical Department of the University of Buffalo. It is proposed that this Board shall examine all candidates for the degree of M.D., and confer diplomas instead of the medical colleges. The plan is one which, if carried out with something like legal force, would be of great importance to our profession and to the community at large. There is no doubt that such a Board of Examiners, themselves properly qualified, would reject a large number of applicants annually who are passed by the schools. And this very fact would at once elevate the standard of qualification. But, after all, is such a scheme practicable? Who is to appoint the Board of Examiners? Shall we go to the Governor and Senate? In that case we can readily determine the character of the Examiners; they will be mere politicians. Shall we succeed better if we give the appointing power to the State Medical Society? We think not. The nearest approximation to a scheme of appointment that would secure a qualified Board, would be to give the power to the medical schools. The idea will doubtless prove chimerical. The only scheme that suggests itself as practicable is a regulation on the part of the American Medical Association admitting to its fellowship only such members as have passed a thorough examination by a board or college of its own creation. The title M.D. already passes for nothing, and might as well be considered only an evidence of an inferior grade of qualification; a new title should be given to those who attain to a fellowship of the American Medical Association. It is stated that the Buffalo Medical College has perfected the proposed plan of a Board of State Examiners, but we are not informed as to its details. PROF. LEE, with whom the scheme originated, has given much attention to this subject, and we hope he will favor the profession with his views.

Obituary.

SILAS L. CONDICT, M.D.

DR. CONDICT was a native of New Jersey, born in Morristown, Morris county, in August, 1806. His father, the Hon. Lewis Condict, was an eminent public man in the Legislature, and for twenty years a member of Congress from that State. Dr. Silas Condict received his classical education at Princeton, and studied medicine under the direction of Dr. Sewell, of Washington City. Entering upon his profession, he practised for a time in Morristown, whence he removed to Newtown, Long Island, where he remained some years. He afterwards settled in the city of New York, but soon returned to his native State, and finally chose Jersey City as his home, where he has taken an active and useful part in all public interests, and distinguished himself as a faithful and skilful physician, a kind, unselfish friend, and a zealous promoter of the cause of morality, temperance, and religion.

At an early period in the history of the temperance reform, Dr. Condict was deeply impressed with the importance of the cause, and devoted himself to its advancement with an ardent and untiring perseverance which have seldom been surpassed. When the order of the Sons of Temperance was instituted, he united with it, and labored constantly in its service. As a member, and often as the presiding officer of Fidelity Division in this city, as Grand Worthy Patriarch of the order in the State, and finally as the honored head of the order in North America, he was universally regarded as one of the most distinguished and efficient promoters of the great cause of temperance.

Dr. Condict's extensive observation of the vast evils of intemperance, and his warm and active sympathy with its many victims, led him during the last year of his life to reflect much upon the importance of an Asylum for inebriates for his State, on the plan of the Binghampton institution in New York; and for some of the last months of his life he gave his time and efforts in that direction, visiting different places, and consulting leading minds, and preparing the way for the object in view. One of his late services, within less than a week of his death, was the presentation of his plans to the New Jersey Medical Society, by whom they were cordially received, and within a short time it was expected the legislature would grant a charter for the enterprise. Probably no man in the State was better qualified than Dr. Condict for the prosecution of this undertaking, and it is a great public misfortune that he was prevented by death from realizing his large and generous plan.

His devotion to his venerable father in his old age was most exemplary and touching, and to the last that parent leaned on that son's arm with unflinching trust. As a sympathizing friend of the poor and the afflicted, he has left his memorial in hundreds of humble homes in the city, and in every place in which his lot was cast.

DR. W. R. DONAGHE has been appointed one of the surgeons to St. Luke's Hospital, and Dr. D. B. ST. JOHN ROOSA one of the assistant-surgeons to the New York Eye Infirmary.

PERSONAL.—DR. PARIGOT has returned to New York after an extensive western tour. PROFS. BRAINARD and INGALS, of Chicago, were recently on a visit to New York. DR. S. H. HEWITT, U.S.A., has been appointed Medical Director of the Department of the Ohio. PROF. E. EMMONS, formerly professor in the Albany Medical College and author of the geological report on the second district of New York, died Oct 1, 1863, at Brunswick, N.C. DR. J. W. S. GOULEY, U.S.A., has been ordered to the Army of the Potomac, and left New York Feb. 7th.

Correspondence.

DOES THE PHYSICIAN EVER CURE HIS PATIENTS?

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—About six years ago I was requested to see Mr. J. O., a respectable citizen of this town, probably about seventy years of age, who had been ill for some time, and under the care of a well known, if not celebrated homœopath. He made the following statement:—Several months previous he had noticed that his breathing was getting shorter than usual, and became quite hurried and difficult upon ascending a hill, or going up-stairs. Soon after this his feet began to swell, and he could not rest at night in bed unless his head and chest were considerably elevated; there was paucity of urine, and loss of appetite and strength. These unpleasant symptoms increasing, he put himself under the care of the homœopath, who told him that his disease was dropsy on the chest, and commenced the treatment of the case. He was under his care several months, during which time his disease progressed constantly from bad to worse, and at length he was told that he must die. This occurred in the latter part of the autumn of that year, and Mr. O. said to him that, if it were possible, he would like to have his life prolonged until the following first of May, on account of the state of his worldly affairs. This, however, he was told was out of the question; that he could not live until the first of April. It was at this point that Mr. O. thought proper to dispense with the services of the homœopath, and I was requested to see him. I found him in the following condition:—His legs were so enormously swelled, that they resembled literally those of an elephant, and the skin was so stretched that it seemed on the point of giving way; his abdomen was much distended, and his breathing so difficult that he could not lie down at all without the sense of immediate suffocation; the urine was scanty; pulse irregular, and not one symptom that seemed to warrant the hope of recovery. The only thing that was not altogether unfavorable, was the fact that the patient had been a man of good habits, and that if there were any organic lesions that precluded the possibility of recovery, I had failed to discover them. He begged me by all means to do something for him, with which request I complied. The process of nature that was going on at this time, whatever might have been the exciting causes, was this:—The exhalants, by a deposition of water, were rapidly filling up the cavities of the chest and abdomen and the cellular tissue of the lower extremities, and it was perfectly evident that unless this "process" could be suspended or counteracted by a counter-process of absorption, the patient must speedily die. To excite absorption, therefore, was the first and the urgent indication to be fulfilled. The next question was, whether any means or any medicines had been discovered by the use of which, in cases like the present, this object can be effected; and thus an equilibrium brought about between the two processes, the result of which possibly might be the cure of the sick man? The response to this question was that certain medicines have been discovered, by which, in some conditions of the system, this object can sometimes be effected. Of those that I am acquainted with, the most reliable are calomel, squills, and digitalis.

I accordingly immediately prescribed cal. $\frac{1}{4}$ gr., pulv. scillæ, gr. ii., three times daily. In about ten days the secretion of urine was considerably increased, showing that the absorbent system was responding favorably to the medicine. In a short time it became abundant, and in about three weeks all the superfluous water had run off, both from the chest and abdomen, and also from the cellular tissue of the lower extremities. The breathing, of course, became perfectly free and easy; his appetite and strength returned, and when the first of May arrived, instead of be-

ing dead, as had been predicted, he was in the enjoyment of his usual health. I think it was in about two months from this time that there were symptoms of a return of the disease. I immediately directed the medicine to be resumed, and in a very short time all these vanished, and did not again return. The patient was cured. Although I am well aware that a conscientious and intelligent physician will be cautious how he uses the word *cure*, still there are, I am positive, some cases in which it may be done compatibly with truth, and the case above related, in my opinion, is one.

I have related the preceding case, not because I suppose that other physicians do not often meet with cases quite as interesting and instructive, but to test by it the soundness of one of the conclusions to be found in the Annual Address of the President of the State Medical Society before that body last winter. I had seen the address alluded to in the Med. and Surg. Rep., but did not read it until recently, when it was put into my hands by Dr. E. H. Parker, of Poughkeepsie. The address is very able, and contains a large amount of very important truth, expressed in admirable terms; and for this very reason, if it inculcate any error, it will be the more dangerous, the more likely to have an injurious effect. The subject of the address is the "Influence of the Progress of Medical Science on Medical Art," which the author thinks has been *utterly insignificant*, if by medical art we mean the power of arresting or curing diseases. After a free discussion of the subject, he arrives at the following conclusion: "The great object, then, of our art is *not to cure the sick man*, but to carry him safely through those processes by which nature cures him, and to co-operate with nature in those processes; or, when the lesion is irremediable, to prolong life with as much comfort as possible." Is this a sound conclusion? Is this all the physician can do—stand by and watch the progress of the disease? In the case above related, which was one of the most unpromising, my object was to *cure* my patient, and by the means employed he was cured. Can any one doubt this? And that, too, not by co-operating *with* the process of nature that was going on, for that would soon have ended the patient's life, but by inducing *another*, by medical art, of precisely an opposite character; and the system being thus relieved from the oppression caused by the former, the "*vis medicatrix naturæ*" soon established a healthful equilibrium between all the various natural processes of the system, in which health consists. "If by medical art we understand (*merely*) the means of prolonging life, guarding against disease, alleviating pain, and conducting diseases to a safe termination," but not the employment of means "to cure the sick man," physicians can be regarded only as a kind of scientific "head-nurses," very useful to be sure, but by no means occupying a very elevated position among the various liberal professions. For my part I am not willing to take that position; I insist that our object should be to *cure* the sick, and that the present state of medical art, imperfect as it is, will justify us in taking that ground.

The author of the address seems dissatisfied, if not disgusted, with the imperfection and tardiness of the progress of medical art, compared with that of medical science. It is very true that the art is much behind the science, and for obvious reasons. The science of disease, pathological knowledge, is more easy of attainment than a knowledge of true remedies. "*Post-mortems*" can be made when *cures* cannot; but in my opinion it is very bad policy to hold out the idea to the world that medicines are not in truth *remedies*, and that the object of our art is not to *cure*, but to watch, and if possible guide the progress of disease; and I have no doubt but that the author of the address, who is a skilful physician, is doing every day that for which the public place him, and very justly, on much higher ground than his sweeping conclusion will allow him to take.

Although every intelligent medical man, whose field of observation has been sufficiently extensive, knows that the

great majority of diseases get well, or would get well of themselves without any medication whatever; yet he also knows that eases do occur, and that pretty often, that, without the aid of medical art, would infallibly prove fatal. Pretended homœopaths know this, and act upon it, resorting to infinitesimals in nine cases out of ten; but in truth the majority fight the enemy with stolen, that is, with our weapons.

Yours, &c.,
ELIPHALET PLATT.

RHINEBECK, Feb. 10, 1864.

STATE MEDICAL SOCIETY.

(To the Editor of the AMERICAN MEDICAL TIMES.)

SIR—There was an omission in Dr. Vanderpoel's well timed letter, published in your last issue, viz. that he did not notice an *irregularity* in the proceedings, which has occurred on more than one occasion. I allude to the appointment, on important committees, of gentlemen who are neither permanent members nor delegates; this is not in accordance with the constitution of the Society. It has been customary to invite physicians who may be present at the meeting, without any credentials, to take a seat as *members by invitation*. Such members may take part in the discussions, or may read papers, but they are not allowed to vote. If such gentlemen may be appointed on important committees, what advantage or honor, then, I would ask, results from the office of delegate or permanent member? This irregular proceeding occurred at the last meeting; and we trust it may not be again tolerated; such appointments are in violation of law.

"PERMANENT MEMBER."

Army Medical Intelligence.

DUTY OF MEDICAL INSPECTORS.

Medical Inspectors are authorized to inspect, condemn, and recommend for final disposition, such articles of medical and hospital property as may be regarded as useless and unfit for issue. They are the "Authorized Inspectors" for such property, under Paragraphs 1022 and 1023, General Regulations for the Army.

By order of the Secretary of War.

CIRCULAR IN REGARD TO INVALID SOLDIERS.

All invalid soldiers mustered on invalid transfer rolls by surgeons in charge of hospitals, and all men of the 2d battalion companies who can be spared from the hospital, and who have so far recovered from their wounds or disease as to be thought fit for duty in the 1st battalion, will be sent to the invalid camp or depot nearest to the hospital; and they will be there examined by a board, consisting of a field officer of the Invalid Corps and a medical officer of the regular or volunteer service, who shall have power to confirm their transfer to the corps, and to decide to which battalion they shall be assigned; to send those judged fit for field duty to their regiments, and to discharge those whose infirmities unfit them for any duty.

By order of the Secretary of War.

CIRCULAR IN REGARD TO ICE.

Ice provided from the appropriation for the Medical Department, is exclusively for the use of the sick in General and Post Hospitals, and will not under any circumstances be issued, or otherwise disposed of, to officers or soldiers not actually under treatment in them. The most rigid economy must be observed in the issue and use of ice so supplied. Issues to hospitals will be made upon the estimate of one pound daily, per patient, at Washington and points south of it; half a pound daily, per patient, at all points north of Washington, which, with proper care,

will be found an ample allowance. Medical Directors will give such orders as will insure compliance with these instructions.

By order of the Acting Surgeon-General.

ORDERS, CHANGES, &c.

Surgeon George F. Woodward, 18th New York Cavalry, having tendered his resignation, is honorably discharged the service of the United States, with condition that he shall receive no final payments until he has satisfied the Pay Department that he is not indebted to the Government.

Hospital Steward Frederick Devine has been discharged the service of the United States for worthlessness.

The resignations of the following officers have been accepted by the President, to take effect from the dates set opposite their respective names:—

Hospital Chaplain W. W. Reese, U.S.A., Feb. 15, 1864.

Hospital Chaplain William Wilson, U.S.A., Jan. 29, 1864.

Paragraph 39 of Special Orders No. 41, January 27, 1864, from the War Department, convening a Board of Officers at Fort Schuyler, N.Y., has been revoked.

Assistant-Surgeon Corridon Morrow, 48d Ohio Vols. (published officially January 11, 1864), having failed to appear before the Military Commission instituted by Special Orders No. 53, series of 1863, from this Office, within the prescribed time, the President directs that he be dismissed the service of the United States, to date November 2, 1863.

Surgeon William Estep, 126th Ohio Vols., has been honorably discharged the service of the United States on account of physical disability, with condition that he shall receive no final payments until he has satisfied the Pay Department that he is not indebted to the Government.

Surgeon B. A. Clements, U.S.A., has relieved Assistant-Surgeon J. W. S. Gouley, U.S.A., in charge of General Hospital, Central Park, N. Y.

Assistant-Surgeon C. S. De Graw, U.S.A., has reported for duty with 1st Battalion, 18th U.S.I., at Huntsville, Ala.

Assistant-Surgeon G. M. Sternberg, U.S.A., Assistant Medical Director, Department of the Gulf, has received a leave of absence for twenty days.

Surgeon D. B. Sturgeon, U.S.V., has been assigned to duty at Fort Craig, N. M.

Surgeon J. M. McNulty, U.S.V., has returned from leave of absence, and resumed his duties as Medical Inspector, Department of New Mexico, at Santa Fé, N. M.

Surgeon A. F. Sheldon, U.S.V., has relieved Surgeon J. H. Baxter, U.S.V., in charge of the Campbell Hospital, Washington, D. C.

Surgeon C. S. Wood, U.S.V., has been assigned to duty as Attending Surgeon at Camp Union, Sacramento, Cal.

Surgeon S. B. Davis, U.S.V., has returned from leave of absence, and resumed his duties as Medical Director, District of South West Missouri, Springfield, Mo.

Surgeon William Varian, U.S.V., has returned from leave of absence, and been assigned to duty at the General Field Hospital, Bridgeport, Ala.

Surgeon A. Crispell, U.S.V., has returned from leave of absence, and resumed his duties as Health Officer, Fort Royal, S.C. Surgeon C. is under orders for the Department of the East.

Surgeon E. W. Thurn, U.S.V., has been transferred as Surgeon-in-Chief from the 1st to the 3d Brigade, 3d Division, 11th Corps, Army of the Cumberland.

Surgeon Adolf Majer, U.S.V., has visited Washington, D. C., on business connected with the Department of the Interior, and has returned to his duties at Convalescent Camp, San Augustine, Fla.

Assistant-Surgeon George S. Rose, U.S.V., has been assigned to duty as Attending Surgeon at Fort Bascom, N. M.

Surgeon George S. Courtwright, U.S.V., has been assigned to duty at Fort Sumner, N. M. This post is situated on the Pecos River, and is generally known as the "Basque Redondo."

The order assigning Assistant-Surgeon J. W. Applegate to duty at San Augustine, Fla., has been countermanded, and he has been ordered to report to the Chief Medical Officer, Morris Island, S. C.

Surgeon J. G. Hatchitt, U.S.V., has been relieved from duty in Hospital at Knoxville, Tenn., and has reported at Headquarters, 23d Army Corps, in the field, for duty as Medical Director of that Corps.

Surgeon F. H. Gros, U.S.V., Medical Director, 14th Corps, on sick leave at Pittsburg, Pa., has been ordered before the Board for the Examination of Sick Officers, at Cincinnati, O.

Assistant-Surgeon Frank Reynolds, U.S.V., has been relieved as Medical Inspector, 5d Army Corps, and assigned to duty as Surgeon-in-Chief, 2d Brigade, Horse Artillery, Cavalry Corps, Army of the Potomac.

Assistant-Surgeon William Carroll, U.S.V., has reported for duty at the Headquarters Army of the Potomac, and has been assigned to duty with Artillery Brigade, 2d Army Corps.

Surgeon N. P. Rice, U.S.V., is on sick leave in New York city.

Surgeon D. P. Smith, U.S.V., has returned from leave of absence, and resumed charge of the General Hospital, Fairfax Seminary, Va.

Surgeon C. F. H. Campbell, U.S.V., has returned from leave, and been assigned to duty as Surgeon-in-Chief, 2d Division, 18th Corps, Portsmouth, Va.

Surgeon Thomas Sim, U.S.V., has reported for duty at Baltimore, Md., and has been assigned to the Convalescent Hospital in that city.

Surgeon D. J. McKibben, U.S.V., is on leave of absence at Ashland, Pa.

Surgeon E. F. Sanger, U.S.V., has relieved Surgeon J. H. Rauch, U.S.V., as Medical Director, 19th Army Corps, Department of the Gulf.

Surgeon P. A. O'Connell, U.S.V., has been assigned to duty as Medical Director, 9th Army Corps.

Assistant-Surgeon William S. Ely, U.S.V., has returned from leave, and resumed his duties, at Division No. 1, General Hospital, Annapolis, Md.

Assistant-Surgeon R. W. Pease, U.S.V., has reported for duty at Headquarters, Army of the Potomac, and is assigned as Medical Director, Cavalry Corps.

In addition to his duties as Surgeon-in-charge, Division No. 3, General Hospital, Alexandria, Va., Surgeon E. Bentley, U.S.V., has been assigned to the Contraband and Claremont Eruptive Fever Hospitals and to Brigadier-General Briggs' command.

Surgeon J. H. Baxter, U.S.V., has been assigned to duty with the Provost Marshal-General as chief medical officer of his bureau.

Surgeon S. A. Holman, U.S.V., has relieved Surgeon Charles O'Leary, U.S.V., as Medical Director, 6th Army Corps, Army of the Potomac.

Several of the large General Hospitals at Memphis, Tenn., are being evacuated.

A new General Hospital has been established at Pulaski, Tenn.

John Frazer, U.S.A., Joseph Lombard and G. F. Bentley, of Connecticut, William A. Renss and James Palmer, of Washington, D. C., Charles Raymond and C. R. Field, of New York, Charles E. Lord, of Massachusetts, P. M. Neville, of Ohio, H. E. Daniels, of Illinois, C. C. Jewell, of New Hampshire, and C. F. Widstrand, of Minnesota, have been appointed Hospital Stewards in the U.S.A.

Medical News.

DR. J. SOLIS COHEN has resigned from the U.S. Navy, and resumed practice in Philadelphia.

DR. JAMES R. WOOD resected the knee-joint at Bellevue Hospital, on Saturday, the sixth inst. Conservative surgery is now much cultivated in that institution.

THE President elect of the New York State Medical Society is DR. FREDERICK HYDE, of Cortland County. DR. HYDE is one of the most distinguished practitioners in Central New York, and Professor of Surgery in the Geneva Medical College.

BEDFORD'S OBSTETRICS.—The third edition of this excellent text-book is issued within the space of thirteen months, and, as we notice, is in course of translation in *Berlin*. Such success is very gratifying to the author, and is pleasant to the national pride of all of us.—*Cincinnati Lancet and Observer*, for January.

MIDWIVES IN PHILADELPHIA.—We learn from the *Reporter* that of the twelve persons who attended the largest number of obstetric cases in 1861, seven were midwives. The largest number of cases attended by one person (a midwife) was 247, and the lowest 124. The average number of cases attended by the seven midwives was 174. The average number attended by the five physicians named was 164.

LUNACY.—The French Government has lately been so alarmed by the medical reports as to the increase of lunacy caused by too many intermarriages of parties previously allied to one another by blood, that it has ordered an additional column to be inserted in the baptismal registers to show whether the parents of a child were, before marriage, connected with one another, and in what degree.

MEDICAL SERVICE IN THE FEDERAL ARMY.—Mr. Charles Mayo sends to the *Medical Times and Gazette*, London, "the enclosed extracts from a letter, which has just reached me from a comrade in the Medical service of the Federal army, which may be interesting to some of your readers. I should explain that Dr. Hammond, who had fallen into disfavor with the Secretary of War (Mr. Stanton), had been kept for some months on a tour of inspection of the Military Hospitals in all parts of the States, while a substitute was installed in his place in Washington. The person referred to as 'S—' was a subordinate in the Surgeon-General's office, who was, as may be inferred, no favorite in the service. His punishment is one to which penal servitude would be leniency. A journey of four or five thousand miles, including the passage of the Rocky Mountains in mid-winter, and ending in the wilds of a scarcely inhabited territory, is a task from which the boldest pioneer of civilization might shrink."

PHILADELPHIA, JANUARY 8, 1864.

"... Hammond (the Surgeon-General), after going through the region of the Gulf and Lower Mississippi, arrived, two weeks since, at Nashville, where, in coming down the steps of one of the Hospitals, he fell and

so injured his head and back, that he has complete paralysis of the lower half of his trunk, and, of course, of both lower extremities. He will never stand upon his feet again.

"Acting Surgeon-General Barnes has been in his place in Washington nearly ever since Hammond left for New Orleans, and will probably be made Surgeon-General. That monkey, S—, has received at last a part of his dues. His history is a short and instructive one. After Hammond left Washington, S— assumed the purple, and held sway for just twenty-four hours, during which brief period he issued two impertinent orders, after his usual manner, to Assistant Surgeon-General Wood, at St. Louis. On the following morning, Stanton ordered S— to report for immediate duty to Wood. On arriving at St. Louis, he was kept in Wood's ante-room for a few hours, and then ordered forthwith to report for duty in the department of Santa Fé, New Mexico, where, I am very credibly informed, he was ordered to report in person for immediate duty at an outpost in Oregon. No doubt he is now wandering or plunging through the frozen snows of the Rocky Mountains. In his worse than Siberian exile he will enjoy ample leisure to reflect upon his many heartless acts."

HUDSON COUNTY MEDICAL SOCIETY.—At a meeting of the Hudson County Medical Society, held in Jersey City, Feb. 8, 1864, the following resolutions were unanimously adopted:—

"Whereas, It has pleased Almighty God to take from us, by death, our late professional associate, Dr. S. L. Condict, a member of this society for a number of years, and whose genial companionship had won our fraternal love; and

"Whereas, It seems becoming in us to show some token of our appreciation of his worth; therefore be it

"Resolved, That while we bow in humble submission to Divine will, we mourn the loss of an esteemed associate, a tried friend, and a worthy brother.

"Resolved, That we will love to cherish his exemplary character, his professional zeal, and his Christian life, as worthy of imitation not less as a man and a Christian, than as a professional brother.

"Resolved, That we tender to his bereaved family our heartfelt sympathy, and pray that a merciful providence will support them in their affliction.

"Resolved, That we attend the funeral of our deceased brother in a body. That a copy of these resolutions be transmitted to his family, and that they be published in the Jersey City papers, the AMERICAN MEDICAL TIMES, New York, and the *Med. and Surg. Reporter*, Philadelphia.

J. H. VONDY, M.D., President.

"J. W. HUNT, Secretary."

BELLEVUE HOSPITAL MEDICAL COLLEGE, }
February 13, 1864. }

At a meeting held by the students of the Bellevue Hospital Medical College, for the purpose of taking into consideration the death of two of their associates, Dr. Charles E. Harris and Wellington S. Hickok, and also to express the feeling of the class in regard to them, the following resolutions were adopted:—

Whereas, Our late associate, Dr. Charles E. Harris, a member of the Graduating Class of 1863 and 1864, and connected with the medical staff of the 51st Street Military Hospital, has been removed by death, therefore we, the members of the class, in token of the sincere respect in which we hold his memory, do hereby resolve:—

1. That we are called upon to mourn the loss of one who, by his truthfulness, manliness, and courtesy, endeared himself to all around him.

2. That we acknowledge in him the loss of a faithful student, and of one who was zealously devoted to his profession.

3. That we express to his parents and friends our deepest sympathy with them in their bereavement.

4. That a copy of these resolutions be sent to the parents of the deceased, and that they be published in the AMERICAN MEDICAL TIMES.

ISAEL PRIOR, Chairman.
W. A. WEYMAN.
JOSEPH DENNISON.
ALEX. LOWE.

Whereas, It has pleased God in His wisdom to summon from our presence our friend and fellow-classmate Wellington S. Hickok, therefore we the members of the Graduating Class of 1863 and 1864, with sincere respect to his memory, do hereby resolve:—

1. That we shall ever love to remember and appreciate that spirit of truth and deportment which characterized his life, his many acts of kindness, and the perseverance with which he pursued his studies.

2. That we deeply sympathize with the parents and friends of the deceased in their bereavement.

3. That a copy of these resolutions be sent to the parents of the deceased, and that they be published in the AMERICAN MEDICAL TIMES.

ISAEL PRIOR, Chairman.
W. A. WEYMAN.
JOSEPH DENNISON.
ALEX. LOWE.
O. BRITTON, Jr., Secretary.

Original Lectures.

LECTURES ON GUNSHOT INJURIES OF THE HEAD.

By FRANK H. HAMILTON, M.D.,

PROF. OF MILITARY SURGERY AND FRACTURES AT BELLEVUE HOSP. MED. COLLEGE, AND LONG ISLAND COLLEGE HOSPITAL; SURGEON TO BELLEVUE HOSPITAL; LATE MEDICAL INSPECTOR, U.S.A.

LECTURE II.—PART II.

NEXT, gentlemen, let us consider those accidents which are still more serious, in which the ball has entered the head and passed entirely through, or in which large portions of the brain have been removed. It is an observation of Mr. Guthrie, I believe, that the upper and back part of the brain receives an injury with less danger of fatal consequences than any other portions of the organ, and that the danger is increased proportionately as you pass forward, that is to say, an injury on the top of the head is more dangerous than the first-named; that injuries of the anterior portions of the hemisphere are still more fatal; but the most fatal of all are injuries of the base.

If the symptoms plainly enough indicate that spiculae of bone are penetrating the dura mater or brain, it will be certainly your duty to remove, as far as possible, the offending fragments, either by the use of the forceps, the levator, or the trephine.

Here is another young man who has received a severe gunshot injury of the head, and whose case will illustrate how much nature can accomplish without aid from the surgeon. Corporal George W. Monk belongs to the 78th N.Y.V., 12th Corps, which corps has, under the command of General Slocum, done a great deal of hard fighting. The wound from which Corporal Monk is at present suffering was received at the battle of Chancellorsville May 4, 1863, nine months ago. A ball entered the right parietal bone near its posterior-superior angle; he fell to the ground in a state of insensibility, but he does not think he remained long in this condition; when consciousness returned, he put his right hand to his head, and is quite certain that he passed his finger into the wound one or two inches. His left arm and both of his legs were at this moment paralysed. He remained upon the field three days, and on the third day, after having been exposed without shelter to a cold and drenching rain, he was seized with convulsions. The convulsions have occurred at intervals from that day until the present time, but the paralysis has disappeared entirely except from his left arm, and in this limb it remains in only a slight degree. Several fragments of bone, including both plates, have escaped from time to time, but no surgical operation was ever made. The wound continues to discharge pus in a moderate quantity. The ball has never been found, and although we can scarcely doubt that it was withdrawn with his cap, which he says was perforated, yet it is possible that it remains within the skull.

It is a point worthy of remark in this case, that at the end of three weeks a secondary hæmorrhage took place, probably from the median meningeal artery, and which came near proving fatal. It was finally arrested by plugging the wound with lint. About four weeks later a second hæmorrhage occurred, but at this time it was more promptly arrested.

At Sharpsburg, Va., I saw on the 11th of Oct., 1862, private D. A. Kemper of the 15th S. Carolina Regt. (Confederate), who had been wounded at the battle of Antietam. A rifle ball had struck the back part of the occipital bone, a little to the left side, tearing up the flesh, breaking and depressing slightly both tables of the skull. The ball lodged under the scalp, and was not found until the fourth day. No symptoms of injury to the brain have occurred; and I found him on the twenty-fourth day walking about, the wound nearly closed and feeling perfectly well. The

only surgical interference which had been practised was the removal of the ball from under the skin on the fourth day. The treatment had consisted in rest, low diet, and cool water dressings.

In the same hospital I found Lieut. M. A. Grant, of the 12th N. Y. Cavalry, who had been wounded four weeks previously at South Mountain by the fragment of a shell. The skull was fractured and slightly depressed. No attempt was made to lift the bones. He was delirious several days, and had convulsions on the sixth and seventh days; but the delirium and convulsions ceased after a free bleeding from the temporal artery. When I visited the hospital he was improving rapidly, all signs of meningitis having long since disappeared. There was no paralysis, and the convulsions had not returned.

As to the exact amount of injury which the brain may sustain without producing death we are unable to say; but it is surprising to note how much cerebral structure may be destroyed or removed in one instance without causing death, and on the other hand how slight a lesion of the same organ may result fatally.

One of the most extraordinary cases of recovery upon record, probably, is that of the man Gage, who was shot through the head with a tamping iron, three feet seven inches in length, one inch and a quarter in diameter at its largest end, and weighing thirteen pounds and a quarter.

The accident occurred in 1848; and Dr. Harlow, of Cavendish, Vt., in whose practice it took place, described the wound as commencing just anterior to the ramus of the inferior maxilla, on the left side, taking a direction upwards and backwards towards the median line, and terminating at the junction of the coronal and sagittal sutures. In its course this huge mass of iron had traversed the left anterior lobe of the cerebrum, extensively fracturing the frontal and parietal bones, protruding the globe of the left eye from its socket by nearly one-half of its diameter, and lacerating the superior longitudinal sinus. In 1860 this man was still living and in the enjoyment of good health.

This single example will suffice to illustrate what terrible injury the brain may suffer without causing death, or indeed entailing any serious consequences; and you will be encouraged by it to hope for a successful issue in many of the most unpromising cases.

If the ball has perforated the skull, and life is not extinguished completely, you ought at once to examine the wound at the point of entrance in order that you may remove such small spiculae of bone as may lie near the orifice; and if larger fragments are driven in they should be elevated, and, when they cannot be extricated otherwise, the trephine or Hey's saw should be applied.

If any of the large sinuses have been opened the bleeding will generally be very profuse, but in most cases when there is a free external opening, it can be arrested, at least temporarily, by moderate pressure.

A few days ago a lad, about ten years of age, was brought into the wards of Bellevue Hospital, whose skull had been fractured by the wheels of one of the street cars. I found him soon after the accident insensible and greatly exhausted by the loss of blood, which had been flowing freely from the lateral sinus. A large portion of the occipital bone had been broken up and torn away, but a loose fragment was resting over the wound in the sinus. Dr. Lauderdale, the intelligent House Surgeon, had noticed that the weight of this fragment was sufficient to stop the bleeding, and that when it was lifted by the forceps the blood flowed freely. I removed the fragment and exposed a laceration of the sinus more than half an inch in length; but the bleeding was at once arrested completely by a pledget of lint secured in place by a light turn of a roller. The hæmorrhage did not recur, but the patient died during the night.

If the bleeding is from an artery within the skull it will be found much more difficult to control, but it may sometimes be arrested by pressure made with the finger, the pressure being made from the inner surface of the dura

mater towards the skull; sometimes even a pledget of lint will control it, and in a few examples the great meningeal artery has been found so completely buried in the inner plate of the skull that a small wooden plug has served to arrest the hæmorrhage.

We ought not to omit to mention that in case the wound is made by a round ball, and especially if it has been discharged at short range, the opening in the skull is frequently quite round and not larger than the ball itself. And in a few instances there will be found no line of fracture or of fissure extending from the circumference of the opening in any direction. We may see the same phenomenon exemplified in the circular hole made through a pane of glass when a pistol ball is sent through with considerable force. If, however, the ball is moving slowly, or if it is a conical ball, the skull is liable to be more or less extensively broken, and especially at the point of exit.

We will suppose, next, that the ball has penetrated the skull, but has not passed out. No counter-opening can be found, and it is fair to assume, as a general rule, that the missile remains within the skull, although it is certain in a few instances it has been accidentally drawn out by some portion of the cap or other portions of the clothing which covered the head.

Surgeons have collected, after many years, a considerable number of examples in which balls have remained thus buried within the skull without causing death during many weeks or even months; these balls being inclosed, as the autopsy finally shows, in perfectly formed membranous cysts.

When the army of the Potomac advanced towards Fairfax Court House, on the 29th of Sept. 1861, we found living near Munson's Hill a man named Mortimer, belonging to the class called here "Poor Whites," who, being suspected of being friendly to the Union, and of conveying information to our pickets, had been shot at his own door by the Confederates. This happened the next week after the Zouaves took possession of Alexandria, some time in June, I think, of the year 1861, and he had never been able until now to obtain any surgical advice. He stated to me that he received at the same moment three buckshot, one of which entered the right shoulder, one the left shoulder, and one penetrated the skull near the middle of the forehead. None of these shot had ever been removed, but those in his shoulders gave him no inconvenience. The first effect of the injury to his head was to render him unconscious, but from this condition he soon recovered, and has been able ever since to walk about a little; walking fast, however, or stooping down occasioned severe vertigo. The same effect was produced by any mental excitement. His limbs were weak, but not paralysed. He informed me that he felt a weight or sensation in the back of his head as if the shot was there. The wound was still discharging, and whenever it closed, as it did occasionally for a short time, his symptoms were greatly aggravated. I saw this man again on the 26th of Jan., 1862, about eight months after the receipt of the injury, and found that no material change had taken place in his condition.

In a Philadelphia journal for 1858 we read as follows:—"A man named Courshan was yesterday convicted in the Court of Quarter Sessions of an assault and battery with intent to kill. A number of colored men got into a street brawl about a woman, and one of them fired a pistol at another of the party, a sailor. The slug from the pistol pierced the skull of the sailor, and buried itself deep in the brain. The wounded man was taken to the hospital, where his wound was dressed without the ball being extracted, and the sufferer was left to die. But he did not die. In the course of time he got well, and he has actually gone to sea with a slug in his brain."

Hennen mentions that he has seen "no less than five cases where a ball has lodged in the substance of the cerebrum without immediately producing a fatal event." Lawrence found a pistol bullet in the brain of a young man which had entered the roof of the orbit, and, having tra-

versed the anterior part of the cerebrum, was arrested by the skull near the coronal suture. He had survived the injury two weeks without presenting one single symptom to indicate that the brain was injured.

Guthrie relates that, "during the war with the United States, in 1814, a soldier in Canada was struck by a ball which lodged in the posterior part of the side of the head; the wound healed, and the man returned to duty. Twelve months afterwards, having got drunk, he fell in the streets of Montreal and died. The ball was found lying on the corpus callosum, where it had made a hole or sac for itself." The same writer mentions a similar case in which, the ball having been received at the battle of Waterloo, the man got well and went home, but in a fit of intoxication he suddenly fell dead. The ball was found lodged in a cyst in the posterior lobe of the brain.

I have taken the pains to relate to you carefully a few of these remarkable examples in order that you may see the possibility of the patient's surviving a certain length of time, even though the ball should not be removed, and to impress upon you the necessity of enjoining upon such persons strict habits of temperance, and the avoidance of all sources of mental or physical excitement. It is easily seen that the results do not warrant a surgeon in permitting a ball to remain, whenever it is possible to accomplish its removal.

If you are curious in these matters, you may find additional cases collected by Mr. South in his notes to Chelius's Surgery, the longest period during which the patient survived being eighteen months. This was in the instance mentioned by Langlet. The ball weighed seven drachms.

What, then, shall you do if a ball has entered the skull and has lodged? Will you introduce a probe and explore freely until it is found? Will you trephine the skull, so as to enlarge the external opening, and then proceed to search for the ball more thoroughly? Certainly not. In the first place the ball has not always passed through the brain in the same direction in which it entered. This portion of a skull, taken from a soldier who was killed at the battle of Fair Oaks, on the first of June, 1862, will illustrate this statement. The specimen was presented to me by Dr. Swinburne of Albany. This ball, a conical ball as you will see, entered the skull somewhat obliquely, and its side coming in contact with the opposite margin of the broken bone, it was immediately deflected from its original course, and its track through the brain was found to be at a considerable angle with the line of its entrance. When the ball struck upon the opposite margin of the broken skull, it was nearly cut in two, but it still retained sufficient momentum to traverse the brain to its base.

Moreover, the natural structure of the brain is so soft and fragile that when you introduce a probe it is almost impossible to determine whether you are following the track of the ball or not. If the probe falls in by its own weight it is probably following the ball, but if it requires some force to move it forward, you cannot be certain where it is going. The finger is a safer instrument, but even this may be plunged into the structure of the brain without your being conscious of your error.

It is pretty certain, also, that a ball which has been projected with sufficient force to enter the cranium will have enough force remaining to penetrate very deeply, if not entirely through the brain.

Larrey once traced out and removed, by a counter-opening made with the trephine, a ball which had passed several inches along the course of the superior longitudinal sinus; and some other cases are mentioned in which a ball has been found and successfully extracted which lay quite deep within the structure of the brain. It is much more common, however, to find examples of successful removal recorded in which the missile has merely entered the skull and has been found upon the dura mater. In such cases, if the opening is not sufficiently large to enable the operator to extract the ball, the trephine may be required.

Dr. Hann, Surgeon U.S.A., relates a case in which he

found the ball resting upon the dura mater, directly under the skull. He trephined the man, removed the ball, and the recovery was complete.

Among the results of gunshot injuries of the head I must not omit to mention *convulsions*, and which occur under such a variety of circumstances that it is not very easy to explain their exact pathology. They occur at all periods of time, from the moment of the receipt of injury to the latest day of life; in many instances the first attack is after the lapse of ten or fifteen years, but when convulsions have once occurred, they are prone to continue during life. My observation leads me to think that after gunshot accidents they are most likely to make their accession between the third or fourth and tenth day, or at the time of the accession of inflammation of the meninges, or of the brain. In the great proportion of cases, also, fragments of bone have been found pressing inwards upon the brain. Sometimes the pressure of extravasated blood has seemed to be the only provocation, and, at a later day, effusions of serum or of pus. It may be proper to infer, perhaps, that in all these cases irritation, established either directly or indirectly, is the cause of the convulsive muscular contractions.

I will cite a few illustrative examples. Two have already been mentioned, namely, the case of Lieut. Grant, in whom the convulsions commenced on the sixth day, but ceased on the following day after a free bleeding from the temporal artery. The skull was slightly depressed, but no attempt was ever made to change its position. The second case was that of Corporal Monk, in whom the convulsions began on the third day, and still continued after the lapse of nine months: it is possible, I informed you, that in this case the ball remains within the brain.

James McKabe, of the 4th N.Y.V., was wounded on the 17th of September, 1862, at Antietam, by a ball which grazed the right parietal bone, breaking and slightly depressing the fragments. No surgical operation was then made. On the fourth day he had convulsions; his surgeon removed the broken pieces, the convulsions ceased, and when I saw him, at Frederick City, Md., four weeks later, they had not returned, but a paralysis of his left side remained.

Sergeant Monroe Halloway, of the 67th Ohio Vols., was wounded at Fort Wagner August 18, 1863, by the fragment of a shell, which fractured the right parietal bone at its superior and posterior angle, producing a slight depression. He was for a time unconscious, but soon recovered. After the lapse of about forty-eight hours he began to have convulsions, and they continued a week or more. The fragments were then removed, and the convulsions ceased. Four months afterwards I found the wound still open, but the convulsions had never returned; he had no paralysis and was walking about; indeed, he declared that he felt well.

In the following example partial convulsions were produced by an attempt to remove the broken pieces.

Private Edmund Gordon was shot while on picket duty near Yorktown, Va., on September 18, 1862, the ball breaking in the skull near the anterior-inferior angle of the parietal bone of the left side. He remained all night on the ground. When he reached the hospital he was unable to speak, but he seemed conscious and could walk. The loss of the power of speech, together with the depression of the fragments, seemed to authorize the use of the trephine. After having removed a circular piece of bone, and while lifting the depressed fragments, the left side of his face became violently convulsed, but this ceased when the fragment was removed. A pretty free hæmorrhage, which immediately occurred from the middle meningeal artery, ceased spontaneously in a few minutes, apparently from the pressure of the brain from within. Two days after I found him doing well, but I have not heard from him since.

Original Communications.

FEIGNED DISEASE AND ITS DIAGNOSIS, AS OCCURRING IN MILITARY PRACTICE.

By ALEX. J. C. SKANE, M.D.

DIAGNOSIS, or the recognition of disease, is well known to be a branch of the science of medicine which requires talent and thorough education on the part of the physician or surgeon. It being the basis of medicine as a practical art, no one can hope for success in the treatment of disease, who is ignorant of where and what the disease is, no matter how extensive his knowledge of therapeutics may be. There are, and perhaps ever will be, cases in which it is difficult, and even impossible, to say with certainty what the disease is; and yet remedies may be used to advantage in relieving the sufferer; but, from the advancement made in this branch of the science within the last half century, few diseases cannot be recognised by the skilful diagnostician, providing the objective symptoms be correctly afforded by the patient. In civil practice there is generally no difficulty in obtaining a truthful history of the patient's condition and feelings, which is an important part of the data from which almost every diagnosis is formed; and, when we consider the importance of objective symptoms, it is at once apparent how much the difficulty is enhanced when these symptoms are unattainable, or falsely presented, which occasionally occurs in military practice, where feigned disease is by no means uncommon with those who would avoid unpleasant duties.

Medical education generally is calculated to prepare men for civil practice, and but little attention is given to feigned disease; the young surgeon, therefore, finds that he has a new and important lesson to learn in diagnosis when he engages in military service. Though there are cases of feigned disease which cannot be detected, yet, by giving attention to the subject, much can be accomplished, and the malingering's chances of escape greatly limited. Indeed, at a time not far remote, the diagnosis of thoracic disease was more obscure than ever feigned disease was or could be; but now those affections are as well understood and as readily diagnosed as any class of diseases; and there is little doubt that, if the attention of the profession were fully given to the subject, malingerers would receive their just treatment, and the really sick would be less liable to suffer, while the surgeon would be saved from frequent causes of embarrassment and regret.

The cause of feigned disease is common to military life, for it is seldom met in private practice. Fear of the battlefield, and the hardships of camp-life, are doubtless the principal causes; and it appears to be a growing evil, as old soldiers and old men make the best malingerers. The clinical history of feigned disease of course varies with every case, but there are some general indications of it which are common to many cases, and furnish an important guide to the surgeon. If a patient complains of pain, he often locates it where pain is seldom felt, and it has no relation to the clinical history of any known affection; in other words, it is not associated with any other symptoms, nor does the general condition of the patient give any indication of its existence. As, for example, a patient who was lately under my care complained of great pain in the gastric region, brought on, as he stated, by an injury. The description of the pain was like that sometimes given by patients affected with gastric derangement; but he had also great tenderness on pressure, and pain on moving in any direction. No injury of the abdominal muscles could be detected; the appetite and nutrition generally were, to all appearance, in very good condition. A dose of morphine was given and repeated, but the pain continued the same. The patient was always very anxious to impress the surgeon with the idea that he suffered greatly, but when recommended for

duty, and told that he must leave in a few days, his complaints decreased, and he speedily recovered.

Duration of pain, with no other concomitant evidence of disease, is an important symptom. Days, weeks, and even months they will continue to complain of pain in the knee-joint, back, or chest, without any change for better or worse, and without presenting any other symptoms of disease. Now, we seldom find either general or local disease remaining for any great length of time without showing other evidence of its presence than pain. Pain and loss of motion often continue for a long time after gunshot wounds and other injuries of that class, but in such cases the cause is apparent. Continued local pain is enough to excite suspicion; and, if no relief is obtained from strong sedative applications, is probably an instance of feigned disease. Men who feign disease, though they play their parts very well, are apt to become slightly embarrassed if questioned closely; they seldom describe their condition with the same ease and freedom that a really sick man does, though they complain a great deal more. I have also noticed that, after giving a full account of their condition, on being asked if that was all that troubled them, they almost always think of something more. Malingers will give a list of symptoms that, were they genuine, would indicate the presence of every common disease.

Pain, with no other indication of disease, most frequently occurs in neuralgia; and in examining malingerers the surgeon is led to suspect that affection; but they have tenderness on pressure, however carefully it is made, which is not common in affections of the nervous system; hence it becomes an important symptom of feigned disease. There is a rule in clinical medicine that should ever be borne in mind by the military surgeon—which is, that important diseases are, in most cases, easily diagnosed if the proper means be employed; and if there is no other evidence of disease than the testimony of the patient, there is good reason for believing that none exists.

There are three classes of feigned disease—1st. Disease exaggerated or prolonged by cultivation; 2d, produced; and 3d, purely feigned. The form of feigned disease, which is perhaps the most troublesome to the surgeon, is that in which there is some slight affection existing, which is greatly exaggerated by the patient. Malingerers make the most of their trivial ailments, and, instead of trying to improve their condition, they cultivate disease so far as they know how. If a man, who is predisposed to feigned disease, receives a slight sprain which unfits him for duty for a time, he is allowed to rest, and is treated according to the indications; but when the time comes for him to exercise the limb, in order to gain strength, he refuses to do so, giving as a reason that it causes great pain; the limb, therefore, continues weak and useless for want of the exercise which he refuses. A case of this nature is now under my observation. The patient states that he sustained an injury of the limb ten months ago, which consisted of a simple sprain of the rectus femoris. He continued to rest the limb long after the swelling and all symptoms of the injury had disappeared, positively refusing to exercise it. He now walks round the hospital wards for his own pleasure, but carefully avoids exercising the limb enough to regain strength. The limb has been repeatedly examined by several surgeons, but no evidence of any lesion can be detected, except that the limb is slightly atrophied, the result of inaction of the muscles. In order to confirm the diagnosis, he was ordered a liniment of tr. opii, chloroform, and acunite, and told that it might cause a little more pain for a time, but that finally it would afford relief. The liniment was used most thoroughly, but without making the slightest difference, according to his word. That appeared almost proof positive that no pain of any amount existed, for the same treatment would have given marked relief in acute rheumatism or sciatica.

This form of malingering, which consists in the prolongation of disease by encouraging the symptoms, generally shows itself in lameness; and if, on a careful examination, there are no organic lesions found, the history of the case

should be fully obtained, which will often betray the patient. The location of the pain may not correspond with the mechanism of the lameness, or the pain complained of may be altogether too great. The length of time the disease has continued should be noted, strong sedative liniments should be made, and the patient's report of their effect consulted. If the disease has been of long duration, and there are no signs of organic lesions present, with an incorrect clinical history, and no relief is obtained from treatment, there is little doubt that the case is one of feigned disease. These means are generally sufficient in cases of lameness of the extremities and what is known as lame-back; although in cases where there is pain and weakness of the back complained of, there are other points worthy of notice.

Soldiers, like other men who are subject to hard labor, have occasionally pain and weakness of the back, which they exaggerate in the history they give; and in some cases this is purely feigned.

It is very common to see men who appear in perfect health bent nearly at right angles, who pretend that they are unable to stand erect, and have constant pain in the lumbar region, but have none of the signs of spinal disease. Now, when there is organic disease of the spine, sufficient to cause lameness, it is generally accompanied by well marked symptoms, so that in the diagnosis of feigned disease it is easy to exclude it; and when that is done, there is little else to suspect than neuralgia; and if the patient is otherwise healthy a little exercise is as likely to cure as increase that affection, so that there is little danger of error in treatment. By visiting the patient when he is asleep it may be observed that, though he could by no means stand erect, he can lie with comfort in a straight position, which he could not do in disease of the spine. The use of ether is an important means of diagnosis in these cases. I have recently seen two men, who pretended to suffer from lame back, brought under the influence of ether, and, though they exercised all the muscles of the body violently while excited by the ether, they had no additional trouble afterwards, as they undoubtedly would have had if affected with any organic disease. Chest affections are frequently exaggerated by malingerers; but in most of those cases the surgeon, if skilled in diagnosis by physical signs, cannot be deceived in such affections as phthisis in the advanced stage, pleurisy, bronchitis, or cardiac lesions; but it is often difficult to ascertain to what extent a patient suffers from emphysema or asthma when physical signs alone are to be depended upon. The same may be said of incipient phthisis. When the physical signs of any of those diseases are present, and the patient exaggerates the clinical history, and voluntarily renders the breathing more labored, the surgeon is very likely to be led astray. I had an opportunity of examining a malingerer who pretended to be very much distressed by dyspnoea with pain in the chest. He had a very healthy appearance, and a well developed chest. Careful examinations were made by several surgeons, who found no other physical signs of disease than feeble vesicular respiration with increased resonance at the apex of the left lung; but neither of those was well marked, and it required very careful examination to detect them. The patient received his discharge, and, upon learning the fact, he soon recovered, proving that the disease, to a great extent, was feigned. The question in such cases is not what the disease is, but to what extent the patient suffers, and how far his faculties are impaired. These points in diagnosis cannot always be settled satisfactorily, nor is it in all cases absolutely necessary that they should be, as there is now a middle position in the army for those who are partially unable for duty. Since the Invalid Corps has been established such cases are more easily disposed of, both to the credit of the patient, and satisfaction of the surgeon.

Deafness, myopia, chronic rheumatism, goitre, hamorrhoids, varicelle, dyspepsia, and palpitation of the heart, are diseases frequently exaggerated, but in such cases the surgeon can generally ascertain to what extent the patient suffers; and in cases where he cannot do so, but is satisfied

that he is affected to some extent, and is not improved by treatment, he becomes a subject for the invalid corps. These will be noticed more particularly in connexion with purely feigned disease.

Produced diseases are neither very numerous nor common, and, as their diagnoses are in general easily made, they may be briefly considered here.

Diarrhœa may be produced by the use of cathartic medicines. When a patient states that he has diarrhœa, and at the same time appears healthy, he should be ordered to use a night-chair; and if the evacuations are free, and appear as if produced by medicine, the surgeon may justly cause him to continue the use of the night-chair, and give astringents, which will soon settle the diagnosis.

Vomiting is practised occasionally. If the matter vomited is of a normal character, and the patient is healthy in appearance, there is good reason for suspicion, and careful watching will soon cure the patient of the practice.

Gonorrhœa is said to be produced at times. When such is the case it is readily diagnosed. There are some who can produce stricture of the urethra, which, on passing a bougie, may appear like an organic stricture. By the use of an anæsthetic the presence or absence of stricture may be readily proved.

Swelling of the extremities may be produced by the use of a ligature, or by sitting or lying with the limbs crossed. If this cannot be detected by watching, the lower part of the limb should be carefully bandaged, when the swelling will disappear.

Ulcers and eruptions of the skin may be produced, but there is little difficulty in distinguishing a traumatic affection from real disease.

We purpose to notice only a few of the most common of purely feigned diseases, and briefly give some of the most important points in their diagnosis, taking them in the following order:—

1st. Feigned diseases of the special senses; 2d. Of the brain and nervous system; 3d. Diseases of the thoracic and vocal organs; 4th, of the abdominal organs; 5th, of the genito-urinary organs; 6th, of the extremities.

Deafness Partial or Complete.—Those who suffer from deafness have a peculiar expression or general appearance; and the tone of voice is low and monotonous, which malingerers cannot imitate. A very good method is to talk in the presence of the patient of something of interest to him, and notice afterwards if he has learned the subject of your remarks. I recently noticed a case in point. A patient who feigned deafness was examined by a board of surgeons, when one of them stated, in a very low tone, that the patient was a humbug. The man was sent to his ward, and when asked what the surgeons said to him, he repeated the surgeon's remark. Speaking to the patient when he is not aware of your presence, will often expose the deception.

Myopia.—Feigned myopia may be detected by the use of biconcave glasses. Another very good means recommended by some is to ask the patient to read with his nose touching the page, which can be done by the near-sighted, but not by those with normal eyesight.

Amaurosis.—The diagnosis of this disease can be made out readily by the use of the ophthalmoscope, which should be used in all cases where there is suspicion.

Ptosis.—This disease is seldom feigned, but, when it is, it may be detected by surprising the patient, by proposing an operation, by an electric shock, or by careful watching. Among diseases of the brain and nervous system, *headache* may be noticed, because, when headache is complained of without any obvious symptoms, the diagnosis generally rests between neuralgia and feigned disease. If headache continues for any length of time, where all the functions of the system are normal, there is but little doubt that it is feigned, because even neuralgia will not continue long without producing some visible change in the system.

Hemiplegia, Paraplegia, and Paralysis of one or more of the Extremities.—These forms of feigned disease are easily

detected. By surprising the patient, he can generally be made to exercise his will sufficiently to show that the parts are movable. By the use of ether they may be made to move during the stage of excitement.

Epilepsy.—This is one of the most troublesome forms of feigned disease to detect. The well established symptoms of the real disease should be kept in mind, and notice taken if they are present during the paroxysm. Some irritating substance should be placed in the nose or eyes, which may take effect. Sternutatories will answer very well, or a needle may be thrust under the finger-nail for a little way, which will make the subject respond if he is a malingerer. All these means require that the surgeon should see the patient during the paroxysms, which renders the disease difficult to diagnose.

Aphonia.—The only feigned disease of the vocal organs worthy of notice is aphonia, cases of which are quite common. By placing the patient under the influence of ether the diagnosis can generally be made, although, should the patient fail to speak, it is not proof positive that aphonia exists. The treatment of chronic laryngitis may be employed, which will, perhaps, make a speedy cure. But any other expedient will seldom be necessary after the use of ether.

Thoracic Diseases.—Apart from exaggerated diseases of the chest, which have been already noticed, there is generally very little trouble in diagnosis, provided the surgeon is well acquainted with the physical signs of thoracic disease. It may be supposed by those who have given but little attention to the subject, that percussion and auscultation are branches of medical science seldom called into use in military practice; but it is altogether otherwise. Real and feigned diseases of the thorax are met with every day in the practice of the military surgeon; and those who can rely on their knowledge of diagnosis by physical signs, find but little trouble in doing justice to the really sick, and in detecting malingerers. *Incipient phthisis* is difficult to diagnose, but those affected with it seldom feign disease or exaggerate their symptoms. Intercostal neuralgia is common among soldiers, and presents no physical signs; but, unless it is sufficient to impair the patient's general health, it should not excuse him from duty, because that affection, in its mildest form, can be as well treated when a man is doing duty as when in hospital, and perhaps better.

Diseases of the Abdominal Organs.—Swelling of the abdomen is often feigned or produced temporarily by causing depression of the diaphragm, and bending the spinal column forward. In such cases percussion will show that the abdominal organs are normal, or that there is no ascites; and by giving an emetic, or causing the inhalation of ether, the swelling will disappear. Hepatic and other diseases of the abdominal organs are sometimes complained of; but those diseases present unmistakable symptoms when they are present, so that deception is easily detected.

Diarrhœa.—When this disease is feigned it can be detected by the means noticed in connexion with produced diarrhœa.

Hæmorrhoids.—When internal hæmorrhoids are feigned, all that is required to detect their presence or absence is a speculum examination.

Diseases of the Genito-Urinary Organs.—Soldiers can feign diseases of the kidneys without being readily detected, when the surgeon has not at hand every means of diagnosis; but, when chemical tests and the microscope are to be had for the examination of urine, there is little trouble in diagnosing feigned disease of the kidneys.

Hæmaturia.—Hæmaturia is simulated by mixing blood from the gums, or obtained in some convenient way with the urine. By causing the patient to pass his urine in presence of the surgeon, the diagnosis can be settled.

Painful Micturition.—When this is feigned, the diagnosis is difficult. The usual diagnostic means should be employed to ascertain if there is any disease of the urinary organs. If none can be observed, the patient should be watched to see if he shows any signs of pain during micturition, when

he believes himself unnoticed. I had a man under my care recently who pretended to have symptoms of cystitis with painful micturition; but, on the most careful examination, I could find no satisfactory evidence of the disease. A bougie was introduced; and passing the instrument along the urethra the patient complained of severe pain, which decreased on reaching the bladder. I concluded that there was no cystitis, but there may have been some inflammation of the urethra. The urethra was injected with sulphate of zinc, two grains to one ounce of water, which annoyed the patient very much, but cured his painful micturition almost immediately, leaving little doubt in my mind that the disease was altogether feigned.

Incontinence of Urine.—When the patient has been for some time interested in some exercise or amusement, a catheter should be passed, when urine may be found in the bladder. Giving a full dose of opium, and passing a catheter after he has been asleep for some time, is a good means of settling the question.

Lameness.—Under this head chronic rheumatism may be noticed. Feigned rheumatism is hard to diagnose with certainty; but the proper treatment of that affection, which ought to be vigorously pursued when there is room for suspicion, will generally convince the patient that the "cure is worse than the disease," and he will probably have a speedy recovery. Pain in the extremities, causing lameness, has been noticed already. Ankylosis of joints and contraction of muscles, when feigned, may be readily exposed by the use of anæsthetics.

In the general treatment of malingerers, the surgeon will find that, by manifesting an unremitting interest in their welfare, he will be likely to have success, for it is hard for any one to persist in deceiving one whose skill and treatment demand respect; and nothing can be more unpleasant to a malingerer than the constant and careful attention of a medical officer.

CHRONIC DIARRHŒA

IN THE ARMY OF THE CUMBERLAND,

By H. H. GARDNER, M.D., U.S.A.

THE fact that the Federal army has as much to dread from chronic diarrhœa as from rebel bullets, is a sufficient excuse for the few remarks that I propose to submit for the consideration of your readers. And here I must premise, that my views are founded only on observations in the Army of the Cumberland. In other localities the disease known by the same name may differ from that here.

In this locality, it owes its origin to two distinct causes: scurvy and miasmatic influences. In both, the system is vitiated before the disease commences; but, from different causes or by poisons, the one generated within the system, and the other without; or, in other words, it is always constitutional with a local complication. And what is most remarkable in the disease is, that both scurvy and miasmatic fever should have so strong a tendency to produce muco-enteritis. At the commencement, it is easy to distinguish to which class the disease properly belongs; but later they gradually assimilate to each other. Still, after the lapse of months, for the most part the two forms of the disease may be distinguished the one from the other.

When it has a scorbutic origin, it generally comes on gradually; though sometimes its advent is sudden, especially after any undue exertion of mind or body, or whatever else disturbs the general health—as a battle, a skirmish, or hard marching. The tongue is clean, or but slightly furred, though in most cases swollen or flabby; the gums are also swollen, and, as the disease progresses, often become sore and bleed from slight causes; the stools, though frequent, are in color but slightly changed, and in consistency thin, not often watery; the countenance, often after the lapse of weeks, and even months, looks ruddy; the natural color of the cheeks and lips remains; and the

pulse is but little changed from that of health. At the same time the patient complains of numerous "pains, aches, hurts, and miseries" in almost every part of his body to which his mind is directed, and shows great reluctance to exertion, either physical or mental. In fact, his appearance is often such as to induce other than a practised eye to believe he is "playing off." When it arises from miasm, it commences, as miasmatic fevers usually do, either as intermittent or remittent. All of the chills, pains, and aches common to this form of fever are present, accompanied with a disposition to bilious diarrhœa. The countenance is depressed; eyes sunken; expression wan; the cheeks and lips pale; and, as the disease progresses, the patient emaciates rapidly; the stools are sometimes light, but oftener of a dark-brown color and watery. After a short time the exacerbation of fever ceases, and we have in its stead a periodic diarrhœa, returning usually in the latter part of the day or in the night time. This fever often attacks officers, and those on post duty who have been well supplied with fresh meat and vegetables; but does not as often terminate in chronic diarrhœa, as those who have been in the field and lived on "hard tack" and salt pork; which leaves us to believe that, in most instances, what we have called scorbutus has something to do in producing it. Still there are cases which cannot be charged to scurvy; but their number is small. The distinction between the two forms consists in the character of the feces, in the periodicity, in the appearance of the tongue and gums, and in the rapidity of emaciation. If it arises from scurvy, the stools are not greatly changed in color, are thin, not very fetid; the tongue, in a majority of instances, unless in the last stages, is clean; but the gums are often swollen and spongy; the countenance is fresh; lips red; and emaciation progresses slowly.

If from miasm, the stools are fetid and watery; the tongue furred; gums natural; the countenance wan; lips and cheeks pale; and the patient emaciates rapidly. As the two forms call for a different treatment or for different remedies, it is essential that the proper distinction or diagnosis should be made.

If the disease be fever, and in the early stage, a full dose of calomel (if not contra-indicated), and, if necessary, repeated, "not to produce excessive salivation or mercurial gangrene," but to prevent mucous ulceration of even the mouth and fauces with chronic diarrhœa. Full doses of quinine will then cure the fever. And if a mild tonic and stimulating course be pursued, all danger of diarrhœa will soon be over.

But, if the diarrhœa arise from scurvy, there is great danger of its becoming chronic. Now your calomel and quinine will do no good, and may do much mischief. Opiates may be called for; but the main dependence must be on fresh meat and vegetables. Potatoes, green apples, peaches, and pears, if they can be obtained and used as food, will soon cure it; porter, wine, or perhaps whiskey may facilitate a cure. Good broiled steak, scalded with mush or corn bread, and, in the absence of fresh fruit, canned fruit or the vegetable jellies, are useful. When the disease becomes chronic, especially in the army, do not, if you expect or desire to save the life of the patient, put him on dry diet.

One word in regard to climate. Many have recovered on being sent North to their homes; yet I do not think that climate has much to do with the recovery. They go home, live on fresh vegetables, and soon recover. *The same would happen here, were the diet the same.*

With plenty of potatoes, corn meal, or hominy, with a moderate allowance of fruit for the soldiers in camp to be used as diet, the most dreadful enemy that we have to contend with—scurvy and its consequent, or rather one of its forms—will be banished the army. But, without these or some of them, all the medicines in the "*Army Supply-Table*" will be but poor weapons with which to combat this formidable enemy.

I have recently learned that scurvy has again shown it-

self in the Army of the Cumberland. Unless the army is soon furnished with fresh meat, corn meal, potatoes, onions, sour-cROUT, and canned or dried fruit, or some of them, in abundance, as soon as warm weather approaches,—and that is now close upon us in this latitude—our hospitals, yes, and graveyards, too, will be filled to overflowing with our brave soldiers. With plenty of these, we need have little fear of scurvy or of "*chronic diarrhœa*," which is but another name for the same disease.

Leaving the dictates of humanity out of the question, and reducing it to a mere question of dollars and cents, would it not be economy for the Government to provide in time against this fearful scourge? The great triumph of the war has been the banishment of yellow fever from New Orleans. A still greater one is before us—the banishment of *chronic diarrhœa* from our camps. Shall it be done?

NASHVILLE, Jan. 19, 1864.

CASE OF EXPULSION OF TAPE-WORM.

By P. J. FARNSWORTH, M.D.,

LYONS, IOWA.

THE following case of expulsion of tape-worm, by means of the pumpkin-seeds treatment, shows its efficacy so decidedly, that it is worth recording:—A gentleman incidentally mentioned to me that his little boy, a puny lad of four years, had passed some joints of tape-worm. Said he had given him as large doses of turpentine as he deemed prudent, and had given him worm medicine, containing santonine, without any effect. He had given him whiskey punch on one or two occasions, until the lad was quite intoxicated, which was followed by the expulsion of a few joints of the worm. Not wishing to push so equivocal a remedy, he was hesitating what to do next. I had just been reading an article of Dr. Hasbrouck's on the employment of pumpkin seeds for the expulsion of tænia. The boy was of a pale, cachectic appearance, with a capricious appetite, and the father was fearful that he might take a dislike to the emulsion, or confection, before enough had been taken. I advised him to try an infusion. The boy had taken no medicine for several days. His father took the seeds from two ordinary-sized common pumpkins, say four ounces, and made a decoction of about a pint, sweetened it, and gave it freely to the boy to drink, keeping him on his ordinary diet. The first night after taking the decoction there was a very decided diuretic effect. At the end of the second day, at his ordinary stool, he expelled an entire tape-worm, which, from a rough measurement, could not have been less than *twelve yards in length*. The diuresis continued for several days; otherwise there was no change, except the marked improvement that we would expect after the expulsion of so enormous a mass of tænia.

Dr. Hasbrouck fears his cure may be attributed to the turpentine taken twelve days before. Dr. Vedder reports a case of expulsion after taking pumpkin-seeds and five ounces of castor oil, fasting fifty hours, and thinks that "to get the curative effects of pumpkin-seeds, absolute fasting is a *sine quâ non*." Would not fifty hours' fasting and five ounces of castor oil answer just as well? It ought to kill the worm or the patient.

In my case there was an expulsion of tænia after taking pumpkin-seed tea, without any obvious connexion with any other remedy, or any change of diet. The cure might have been accidental, but there is coincidence enough to warrant a fair trial of the remedy whenever opportunity occurs.

Jan. 30, 1864.

DR. HENRY G. CLARK, of Boston, is preparing, for the Transactions of the Boston Society for Medical Improvement, a detailed account of an operation for the removal of a large glandular tumor from the neck, in which bubbles of air were distinctly seen to enter the jugular vein near the clavicle; but by means of pressure and ligature the operation was completed without any ill effects.

CASE OF ERYSIPELAS, COMPLICATED WITH LABOR.

By H. M. FIELD, M.D.

VISITING PHYSICIAN TO THE DEMILT DISPENSARY.

On January 25th, I was called to see Mary Harris, æt. 27 years. I found her laboring under an attack of erysipelas of the face, already of several days' duration. I prescribed, as I usually do in these cases, where the stomach will bear it, tr. ferri chloridi, gtt. xxx. ad xl. in water, every three hours; a mild purge of rhubarb and soda, to be taken at once; and frequent inunction of the entire inflamed surface with fresh lard. Just as I was about to leave, she told me that she was in the family way; but to my question when she expected to be confined, with the inaccuracy for which a certain class of women are proverbial, she replied, "Probably not until a month hence."

Jan. 26.—Disease still advancing; the integuments about the eyes were very much inflamed yesterday; and to-day both eyes are entirely closed. The lard is applied almost constantly, and in as large quantities as can be made to stay on the surface.

Jan. 27.—Disease seems to have reached its acme since my last visit, and to be rather on the decline.

Jan. 28.—Found a new-born infant in bed with my patient. On inquiry, learned she was confined about two hours after my visit yesterday. She had not sufficient premonition of the event to send for any physician, "and it was all over within two hours."

To-day, nearly 24 hours after confinement, everything is progressing favorably; looked in vain for any unfavorable symptoms; inflammation has subsided remarkably since yesterday, both eyes now being quite comfortably open. No marks of erysipelas or other disease about the child; no appearance of its having been brought into the world prematurely. My patient continued to improve, and on Jan. 30th I took my leave.

Comment is unnecessary. I will only say that during the last month I have refused several cases of midwifery, application being made in the evening or course of the night, because in the course of the preceding day I had been in attendance upon cases of erysipelas, there being but little time, within a month past and more, when I have not had as many as three different cases on my hands.

Feb. 3.—To meet any inquiry that might be suggested by the recovery of my patient from the erysipelas, and her discharge in so short a time after delivery, I will add that I have visited the case this morning; find that she has rapidly advanced towards complete recovery. The patient is about the house, and both mother and child are well.

With regard to the external treatment in this case, I will add that I have the notes of a large number of cases of this disease. One class treated with lead and opium wash, and the other class treated with lard. In previous attacks this patient had been treated with the wash, and requested it in the present instance, but was induced to persevere with the lard. This morning she remarked, of her own accord, what I think I have often noticed, to the effect of the more rapid and complete recovery from using the ointment than from using the wash. Her skin, she said, used to come off in large cakes. Now there is only a slight furfuraceous desquamation. I have marked this case, in my note-book, the most severe, both in extent and in degree of inflammation, out of a large number of cases registered.

77 Lexington Avenue, Feb. 3, 1864.

EXPLODED SUPERSTITIONS.—One of the most general, cherished, and persistent of English superstitions was the belief in the supernatural power of the monarchs to cure certain diseases. For centuries few Englishmen, learned or ignorant, doubted that the touch of the hand of king or queen was a sovereign remedy for the scrofula, which was, therefore, called the king's evil, it being the evil the king had most certain power to cure.

American Medical Times.

SATURDAY, FEBRUARY 27, 1864.

COURT-MARTIAL OF ASSISTANT-SURGEON WEBSTER.

THE recent trial of Assistant-Surgeon WARREN WEBSTER, U.S.A., on the charge of "disobedience of orders," and "conduct prejudicial to good order and military discipline," involves some questions of great practical importance to the army service, to the medical staff, and to the cause of justice and humanity. The particular question raised in this trial was as to the amount of jurisdiction which subordinate military commanders have independent of the department commander and the Surgeon-General, over general hospitals. To this phase of the trial we shall confine our attention at present.

Assist-Surg. WEBSTER was ordered by a subordinate officer to arrest a patient in the McDougall General Hospital, of which he had charge, and transfer him to Fort Columbus. It appears that this patient had a few days previously suffered a severe surgical operation, was at the time confined to the ward, and had his wound dressed twice each day; it was believed by Dr. WEBSTER that any effort to move him would prove dangerous to his life. Independently of this fact, however, Dr. WEBSTER declined to comply with the order, for the reason that it did not emanate from the department commander, nor did it reach him through the Surgeon-General, or the Medical Director of the department, the only officers to whom he owed subordination in the management of the hospital. Accordingly he made the following endorsement upon the order: "Conceiving that the General Hospitals are under the sole direction of the Surgeon-General of the Army, I consider it my duty to obey orders directing the transfer of patients from this hospital only when received through the Surgeon-General, or through his representative in this department, the Medical Director." The officer proceeded to execute his order, and the man was taken out without medical examination, by the persons removing him, into the place or condition of his wound, and in a cold rain-storm made to walk a long distance, and in the end sent to Fort Columbus, where it was found that he was not fit or able to be returned to his regiment.

In his defence Dr. WEBSTER has set forth in a clear light the position of the surgeon-in-charge of a general hospital. It is so important that this matter be thoroughly understood that we shall notice some of the more prominent features. It was alleged that he offended by respectfully representing that general hospitals are under the direction of the Surgeon-General, and therefore that orders directing transfer of patients must come through that officer, or his representative in the department, the Medical Director. In reply, he maintained that General Orders, Special Orders, and the custom of the Medical Department warrant such an interpretation. General Orders Nos. 36, of 1862, and 308, of 1863, start with the unconditional statement that General Hospitals are under the direction of the Surgeon-General! The Surgeon-General, in an endorsement of August 13, 1863, directed to Medical Director McDougall, reiterates General Order No. 36, and says that the Secretary of War had decided in a case coming

up from Iowa in conformity with this General Order, and against the authority of Brigadier-General ROBERTS, commanding the district of Iowa, to interfere with General Hospitals. Not only that, but Major-General HALLECK, in an endorsement commenting on the conduct of General Brown, in relation to McDougall Hospital, and produced in Court, maintained that military commanders, subordinate, like General Brown, to the department commander, had no authority to interfere in the management of general hospitals. Every order since issued is in harmony with this decision. For example, in General Orders No. 65, of June 12, 1862, it is ordered that "*each Medical Director must, under the orders of his Department Commander, regulate the distribution of the sick and wounded to the hospitals within the Military Department to which he belongs.*" In the same General Order there is a provision that officers whose duty it is to forward detachments of men from hospitals, "will take care that no men except those provided with written passes from their hospital surgeon, or the Medical Director, shall be allowed to go." General Orders No. 78, of July 14, 1862, appears to confirm the construction that a patient could not be ordered out of a general Hospital without concurrence of the medical director by an authority less than that of the department commander, whose order would be assumed to be by concurrence of the medical director, who is a member of the staff. That order (No. 78) says, that while in general hospitals, "men will be under the fostering care of the Government while unfit for duty; will be in position to be promptly discharged, if proper, and, being always under military control, will be returned to their regiments *as soon as they are able to resume their duties.*" And by General Order No. 36, the chief medical director was the person to determine when men were "able to resume their duties."

Reasoning from such premises, Dr. WEBSTER very pertinently suggests: Did Congress or General Orders intend to place general hospitals under a double head of medical officers and officers not medical? It cannot be denied that the Medical Department, like every other staff-department, must be and is secondary and subordinate to the line of the army which does the fighting; but still that admission does not necessarily decide whether it has not been determined by lawful authority that the Medical Bureau shall have charge and control over men in general hospitals, who cannot fight and are removed from the theatre of active operations in the field. It appeared to him impossible that such general, all-embracing authority over general hospitals could be given to the Medical Department; that surgeons in charge of hospitals could be required to obey the Surgeon-General in respect to inmates, and yet that a subordinate commander in the line, with no claim to professional knowledge, had legal power to interfere and arrest the system which might be prescribed by competent medical authority. If a subordinate officer had authority, independent of the department commander or the medical director, to order one man out of the hospital who was there as a patient, then he could order one hundred; and, in the end, could take away every male attendant and nurse competent to administer to the wants of the suffering; and thus not only impair but *destroy* the efficiency and usefulness of the institution.

Such is an abstract of the defence of Assist.-Surg. WEBSTER, on his trial on the charges of "disobedience of orders," and "conduct prejudicial to good order and military

discipline," in having refused to obey an order of a subordinate officer and transfer a patient who, in his opinion, was unable to leave the hospital. The defence contains a clear and practical statement of the duties of the surgeon in charge of a general hospital, and thoroughly vindicates the accused from the charges made. DR. WEBSTER has always maintained a high reputation for efficient hospital management, and the evidence on this trial confirmed the fact that such reputation had a true basis.

There are several collateral questions growing out of this trial in regard to the status of the medical officer in charge of the general hospital, that we shall reserve for future consideration.

THE COLD AND THE POOR.

THE remarkably cold weather of the past week proved fatal as usual to a number of poor people. The sudden reduction of temperature from 45° F. to zero, with high winds, drove the rich and poor alike to their fire-sides. The sufferings of those who are in a state of chronic inanition, with poor protection from the elements, was fearful. To the well clad and well fed the cold and bracing winter winds prove exhilarating and healthful, but to those who have not the power to generate warmth within or without their bodies, the same weather proves sadly depressing and too often fatal. The real source of suffering and death among the poor in winter is from chronic starvation. With a meagre supply of proper food they maintain a feeble existence in the warm season; but when "a cold wane of the atmosphere" sweeps over the land, the vital powers are suddenly depressed, and often below the point of recuperation. True charity at this season consists in giving good, substantial food, as well as clothing.

DR. SIMS IN PARIS.

WE notice in a London contemporary some account of DR. SIMS's success in his specialty, which he is now practising in Paris. The cases of lesions and deficiencies of the vesico-vaginal region, which were first submitted to him, were of the most hopeless kind under all former methods of treatment. He has, however, been remarkably successful in all the cases on which he has operated. The remark is made that DR. SIMS regards the vesico-vaginal operation "the only justifiable operation for stone in the female bladder." It is stated that DR. S. first performed this operation in 1850. DR. SIMS is also an advocate of the recto-vesical operation in the male, so successfully performed by DR. BAUER, of Brooklyn. The acknowledgment of the merits of DR. SIMS's improvements in practical surgery are flattering to the American profession.

PROVISION FOR RECRUITS.

WE have already called attention to the great necessity of better provision at the rendezvous of recruits for the comfort of the newly-enlisted soldier. We were painfully reminded during the excessive cold of last week of the truth of our remarks. It was currently reported that five persons froze to death at the rendezvous at Riker's Island. It is only surprising that the suffering was not much greater. The men are poorly clad, poorly fed, and poorly housed, and, in consequence, cold only adds the final consummation of death. There have been periods when the single surgeon on the Island had not a particle of medicine, and patients sank and died without let or hindrance.

Such reckless sacrifice of the physical strength of the new armies of the country is deplorable, but apparently irremediable.

Reviews.

CONSUMPTION IN NEW ENGLAND: or Locality one of its Chief Causes. An Address delivered before the Massachusetts Medical Society, by HENRY L. BOWDITCH, M.D. Boston: Ticknor & Fields. 1862. 8vo. pp. 104.

THIS pamphlet, though received a number of months ago, from being accidentally laid aside, has not yet received a notice in this journal, for which apparent indifference we owe Dr. Bowditch an ample apology. In the year 1855, and again in 1856, Dr. Bowditch "tremblingly enunciated" his views "on the topographical distribution and local origin of consumption in Massachusetts." Subsequent investigations have not only confirmed, but greatly enlarged the views thus expressed, and we now have the result of his labors in that direction—the main features of which are that consumption is not equally distributed over New England, as some writers have contended; but that its ravages are influenced to some extent by the nature of the soil on or near which the patients reside; dampness, whether inherent in the soil itself, or caused by percolation from adjacent rivers, ponds, marshes, etc., being one of the primal causes of this disease. This inference is drawn not only from personal observation, but from extensive correspondence, by means of which many valuable statistics are obtained and medical opinions elicited—showing that the greater proportion of deaths from consumption occurs in damp localities. The practical advantage to be derived from a knowledge of these facts, would consist in the establishment of competent Boards of Health, composed of the ablest of the profession and others interested in the study of sanitary science, in a careful selection of ground for the location of towns and villages, in a proper choice of building spots in those localities where dampness prevails, and a thorough system of under-drainage. Whether our author's zeal in the study of his subject has permitted him to overlook other causes that may influence the one in question or not, does not affect the value of his book, which will amply repay one for the time spent in its perusal.

Obituary.

DR. CAMMANN.

THE father of the subject of this Memoir, Charles Louis Cammann, was a native of the kingdom of Hanover, and emigrating to America in 1787, soon became a leading merchant in New York. In 1791 he married Maria Margaretta, daughter of Philip Oswald, also a native of Germany, although the daughter was born in this city.

George Philip Cammann, third son of the above, was born September 7th, 1804, on the banks of the Hudson, in what was then known as Greenwich Village, near the present line of Charlton street.

Their beautiful suburban residence was in the immediate vicinity of Richmond Hill, of historic interest as the headquarters of Washington during a part of the time the Revolutionary army occupied New York.

On the 5th of December, 1805, when George was a little more than a year old, his father died, and left the care of a family of seven children to his widow. How well she fulfilled her duty may be inferred from the honorable positions held by her children, as well as from their devoted affection for her during her whole life. In 1813, Mrs. Cammann removed with her family to Newark, N. J., and placed George in the Latin School of the Newark Academy. }

A companion of his childhood thus writes of him at this period: "He was a lively, active boy, always busy and very mischievous; ever 'slow to wrath,' but very affectionate, and so sensitive that, even when quite a large boy, a hasty or harsh word would bring tears into his eyes; and yet he was patient and uncomplaining when suffering physical pain." An anecdote illustrating his fortitude is related of him. While fishing near a bridge, he ran a fish-hook into his lip, and went to the family physician and had it cut out, fainting three times during the operation. He concealed the occurrence from the family at home, although his lip was so much swollen and so painful that he nearly starved from inability to eat. It would ever have remained a secret, had not the physician alluded to it some time afterwards. The same unselfish heroism made him in after-life a "silent sufferer rather than mar the happiness of his family."

At the Academy, his intimate friend was Thomas Ward—now Dr. Thomas Ward of this city, who was two or three years his junior; and an endearing intimacy sprang up between them, lasting during Dr. Cammann's life. Much of the material concerning his schoolboy and student life was obtained from Dr. Ward. He held a respectable position in his class, more by his indomitable industry than by his aptitude in learning; for he committed to memory slowly and with difficulty. He showed great fondness for the natural sciences, especially for geology; and his room was filled with specimens which he had collected in company with his young friend during their holiday excursions.

In 1821 he entered Columbia College, where he was graduated in 1825. Of his university career we have no particular account, as Dr. Ward was at Princeton; but we are assured that as a student he was not less assiduous and conscientious than in other relations. When he first formed the resolution of studying medicine, he was told that he was too tender-hearted to perform the sterner duties of the profession; but he replied: "My nerves are strong enough to carry me through whatever it may be my duty to undertake." He commenced his medical studies in the office of Dr. Lee of Newark; but his mother and family removing to New York in 1826, he entered the office of Dr. David Hosack, at that time the acknowledged head of the profession in this city. Dr. Cammann delighted to speak of his distinguished preceptor, and related many anecdotes of him as he appeared in the sick-room. No one was ever more master of the situation at the bedside, or commanded more respect by his presence, than did Dr. Hosack; and his acquaintance with pathological changes through the rational signs was really wonderful; but when he approached complicated affections of the chest, he would shake his head and say, "There is a mass of disease here." To him, physical diagnosis was as yet a sealed book.

Dr. Cammann also entered his name as a student in the Rutgers Medical College, then just opened in Duane street. Here he took his degree of M.D. in 1828; and during the ensuing summer he sailed for Europe, to avail himself of the superior advantages which Paris afforded the medical student. He took up his abode in the Latin Quarter, devoting himself to the lectures and hospitals during the daytime, and to private classes in the evenings. He was a constant and enthusiastic attendant at the clinical lectures of Louis, who was at that time the great teacher of physical diagnosis. Laennec had but just passed off the stage, after publishing the last edition of his great work on Diseases of the Chest. Auscultation, as a science, was scarcely ten years old; it was as yet a new revelation; and it is no wonder that it excited the most intense enthusiasm in its youthful devotee, who had already shown marvellous acuteness in distinguishing and analysing sound.

Louis lectured at clinic in Latin, describing the phenomena of disease, and calling upon each of the students in attendance to make himself practically acquainted with the physical signs in the subject before him, and, in hopeless cases of advanced phthisis, marking out on the chest the

position and extent of structural change, which post-mortem examinations uniformly verified.

He was thus diligently pursuing his studies, and had already made great proficiency in knowledge, as well as in the special education of the ear, when the Revolution of 1830 broke out. He and about forty other Americans at that time sojourning in Paris volunteered their services to Lafayette, who promised, if they were needed, to give them a post of honor. They were not called upon further; but the students of medicine had the advantage of seeing a variety of gunshot wounds in the hospitals.

During the vacations, in company with Dr. Ward, who was still his fellow-student and intimate friend, he made several tours of observation through Italy, Switzerland, and Great Britain; and it was during one of these excursions that he received the injury which, in his opinion, damaged his heart, and was finally the cause of his death. For more than thirty years his consciousness of the serious effect of this accident remained a secret in his bosom. It occurred in this manner: They were crossing the Alps on pack-mules, when, in a narrow path beside a precipice, another train of mules appeared. To pass was impossible, and the Doctor, perceiving that his animal was preparing to turn, jumped off to avoid being swung over the chasm, and was crushed against the rock. For a moment he suffered intensely from a sense of suffocation, and for several days he had pain and soreness in the region of the heart. He made no complaint at the time, but proceeded on his journey; and Dr. Ward does not even remember the occurrence. When asked, during my first visit to him in his last illness, if he could account for the heart-symptoms which had so long annoyed him, he related this incident, and said he knew of no other cause, having since then felt palpitation and dyspnoea during active exercise or when under excitement.

In the autumn of 1830 he returned to his native city, placed his sign upon the basement of his mother's house in Bond street, and entered upon the duties of his profession. In 1831 he was appointed one of the attending physicians at the Northern Dispensary. This was before the classification of diseases in the dispensary; and each physician not only attended patients at the Institution, but visited those who were too ill to leave their own homes.

In 1833 he was married to Anna Catharine, daughter of Mr. Jacob Lorillard, and commenced housekeeping in Macdougall street. In 1835 he removed to the house known as the Lorillard Homestead, corner of Lighthouse and Hudson streets. About the same time, through the influence of his friend, Mrs. Bethune, he was appointed physician to the Bloomingdale Orphan Asylum, and performed the duties of the office for many years afterwards.

(To be Continued.)

Army Medical Intelligence.

WAR DEPARTMENT, ADJUTANT-GENERAL'S OFFICE, }
WASHINGTON, D.C., February 5, 1864.

GENERAL ORDERS, No. 47.—All medical and hospital supplies and property in possession of officers of the Quartermaster's Department on the Mississippi river and its tributaries, for storage or safe-keeping, that have been unclaimed for three months, will at once be forwarded to the nearest Medical Purveyors, with invoices setting forth the number of packages, from whom, and when received. Duplicates of the invoices will be sent to the Surgeon-General of the Army.

By order of the Secretary of War:

E. D. TOWNSEND
Assistant Adjutant-General.

SURGEON-GENERAL'S OFFICE, }
WASHINGTON, D.C., February 19, 1864.

I.—Separate reports of sick and wounded rebel prisoners of war treated in U. S. General or Post Hospitals, will be made monthly to this office.

II.—Whenever white and colored troops are treated in the same hospital (either General or Post) separate reports of sick and wounded will be made, in order that the sickness and mortality rates of each race can be correctly ascertained.

III.—Monthly Sick Reports from regiments or detachments of colored troops will present on the first page of the report the number of sick of enlisted men only; the names, rank, and diseases of sick officers of these regiments will be placed under the head of Remarks.

JOS. K. BARNES,
Acting Surgeon-General.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., February 17, 1864. }

CIRCULAR LETTER.—The attention of Medical Directors is called to the following decision of the Commissary-General of Subsistence:

"When cows have been purchased out of Hospital Fund, it is believed that the expense of forage therefor, and all other necessary expenses for the support and keeping of these cows, is a proper charge against Hospital Fund.

(Signed) "J. P. TAYLOR,
"Com. Gen'l Subsistence."

II.—Pension Claims are referred to this office for official evidence of cause of death in the cases of soldiers known to have died on hospital transports and trains, but of whom no report had been made to the Surgeon-General. Such information is required to secure the rights of widows and orphans of deceased soldiers, and Medical Directors will hereafter order all medical officers detailed on duty with the transportation of troops to report to them upon the termination of the voyage or journey, the name, rank, company, regiment, date, and cause of death, of every soldier who has died during the transfer. A certified copy of such report will be at once forwarded to this office.

By order of the Acting Surgeon-General:

C. H. CRANE,
Surgeon, U.S.A.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., February 11, 1864. }

CIRCULAR LETTER.—The attention of Medical Directors is called to the frequency of discharges upon "Certificates of Disability," for "Disease of the Heart," and the necessity for a more stringent application of Paragraph 4, page 6, General Orders No. 212, War Department, Sept. 9, 1863.

Mere functional disturbance does not disqualify for active service, and such cases should be retained in hospital only long enough to establish a correct diagnosis. Organic disease of the heart, without grave constitutional implications, does not entitle to discharge, but may be sufficient cause for transfer to the Invalid Corps. In those well marked and unmistakable cases, accompanied by constitutional symptoms, leaving no doubt of entire disability, which alone entitles to discharge, the certificate of the Surgeon must set forth these facts fully, before receiving the approval of a Medical Director.

By order of the Acting Surgeon-General:

C. H. CRANE,
Surgeon, U.S.A.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., February 15, 1864. }

CIRCULAR LETTER.—The rendition of "Monthly Statements of approved requisitions varying from the Supply Table," called for in a letter from this Office of August 4, 1863, will in future be discontinued, since the purposes for which they were required have been attained.

By order of the Acting Surgeon-General:

C. H. CRANE,
Surgeon, U.S.A.

ORDERS, CHANGES, &c.

So much of Special Orders No. 7, January 6, 1864, from the War Department, as dismissed from the service of the United States Surgeon Michae

D. Benedict, 75th New York Vols., for absence without proper authority, has been revoked, and he is restored to his command, provided the vacancy has not been filled, evidence of which must be obtained from the Governor.

The leave of absence granted Surgeon E. S. Hoffman, 90th New York Vols., by Special Orders No. 7, January 9, 1864, from Headquarters Department of the Gulf, has been extended forty days.

Leave of absence for ten days has been granted Surgeon Radford Sharpe, 15th New Jersey Vols.

Surgeon F. H. Gross, U.S.V., now on duty in the Army of the Cumberland, has been ordered to proceed without delay to Baltimore, Md., and report to the Commanding General, Middle Department, for duty, to relieve Surgeon J. W. Pittinos, U.S.V., in charge of Hospital at Camp Parole, Annapolis, Md. Surgeon Pittinos, on being relieved, to proceed to Louisville, Ky., and report to Assistant Surgeon-General Wood, for assignment to duty.

Assistant Surgeon Andrew McLatchie, 79th New York Vols., now on duty at Annapolis, Md., has been ordered to rejoin his regiment without delay.

Surgeon D. J. McKibbin, U.S.V., has been detailed as member of a Board of Officers to assemble in Washington, D.C., on the 11th inst., or as soon thereafter as practicable, for the examination of applicants for appointment in the Invalid Corps, and of such officers and enlisted men of the Corps as may be brought before it.

Assistant Surgeon S. Adams, U.S.A., will report in person without delay to Surgeon-General W. A. Hammond, U.S.A., and remain on duty with him until the conclusion of his trial.

The permission to visit Washington, D.C., granted to Assistant Surgeon Dallas Baché, U.S.A., from the Surgeon-General's office, is confirmed.

Assistant Surgeon Philip C. Davis, U.S.A., is relieved from his present duties, and detailed as a member of the Auxiliary Board convened at the Signal Camp of Instruction, Georgetown, D.C., for the examination of applicants for commission in the Signal Corps, U.S.A.

The leave of absence on surgeon's certificate of disability heretofore granted Surgeon L. B. Le Blond, 1st Minnesota Vols., by Special Orders No. 6, current series, from Headquarters 2d Army Corps, has been extended ten days. Under the special circumstances the Quartermaster's Department will furnish transportation for him to St. Paul, Minnesota, to which point his regiment has gone on furlough.

The order of Brigadier-General Stemmer, U.S.V., President of Examining Board, at Cincinnati, Ohio, of date February 4, 1864, directing Surgeon F. H. Gross, U.S.V., to join his command without delay, has been confirmed.

Surgeon John R. McClurg, U.S.V., in conformity with instructions from the Surgeon-General, to place a commissioned officer in charge of all Military Prison Hospitals, will, in addition to his present duties, assume a daily supervision of the Military Prison in the vicinity of Cleveland, Ohio. The medical officer now in charge of this hospital will be continued in his present position under the direction of Surgeon McClurg.

Surgeon J. D. Brumley, U.S.V., having reported at Louisville, Ky., has been ordered to report to the Medical Director, District of Kentucky, for temporary duty as Superintendent of General Hospitals, during the absence of Surgeon T. W. Fry.

In accordance with the request of Major-General Curtis, commanding Department of Kansas, Surgeon S. B. Davis, U.S.V., will proceed without delay to Fort Leavenworth, Kansas, and report in person to Major-General Curtis. The Medical Director, Department of Missouri, will detail a proper officer to report to General Sanborn, commanding District of Southwest Missouri, to relieve Surgeon Davis as Medical Director.

Surgeon A. C. Benedict, U.S.V., has relieved Surgeon S. W. Gross, as Chief Medical officer, Morris Island, S.C.

Surgeon John E. Herbert, U.S.V., has been assigned to duty as Executive Officer at Cumberland General Hospital, Nashville, Tenn.

Surgeon E. W. Thurm, U.S.V., is on leave of absence at Washington, D.C.

Assistant Surgeon E. J. Kipp, U.S.V., has been assigned to duty as Executive Officer, 2d Division, General Hospital No. 1, Nashville, Tenn., and as Recorder of the Medical Examining Board for Surgeons and Assistant Surgeons of Colored Troops.

Surgeon R. R. Taylor, U.S.V., has returned from leave, and been assigned to duty as Post Surgeon at Nashville, Tenn.

Surgeon G. S. Palmer, U.S.V., has been assigned to duty as Superintendent of Hospitals at Benton Barracks, St. Louis, Mo.

Surgeon John O. Bronson, U.S.V., has been relieved from duty at the Presidio, San Francisco, California, and ordered to proceed without delay to Fort Humboldt, and report for duty to the District Commander, relieving Surgeon A. R. Eghert, U.S.V. On being relieved, the latter will repair to the Presidio, San Francisco, and report for duty to the Commanding Officer of that post, and also take charge of the Hammond General Hospital and attend the sick at Fort Point.

Surgeon G. L. Panoast, U.S.V., has been assigned to the charge of the Finley Hospital, Washington.

The following assignments have been made by Assistant Surgeon-General R. C. Wood, U.S.A., in compliance with instructions from the office of the Surgeon-General:—

Surgeon Thomas A. Worral, U.S.V., to the Military Prison at Alton, Illinois.

Surgeon J. H. Grove, U.S.V., to the Military Prison, Camp Douglas, Illinois.

Assistant Surgeon Eversman, U.S.V., as Executive Officer, Military Prison, Johnson's Island.

Assistant Surgeon S. S. Shultz, U.S.V., to Military Prison, Camp Chase, Ohio.

Surgeon Henry Janes, U.S.V., has been assigned to the charge of the South Street General Hospital, Philadelphia, Pa.

Surgeon Frederick Lloyd, U.S.V., having closed Jefferson Hospital, Memphis, Tenn., of which he was in charge, has reported for duty to the Medical Director, Department of the Tennessee, at Huntsville, Ala., and is awaiting orders.

Surgeon George F. French, U.S.V., has been relieved from duty at General Hospital No. 3, Vicksburg, Miss., and is en route to Huntsville, Ala., to report to the Medical Director, Department of the Tennessee.

Surgeon Peter Cleary, U.S.V., has been relieved from General Hospital No. 3, Chattanooga, Tenn., and assigned to duty as Medical Director, Reserve Artillery, Army of the Cumberland.

Surgeon Charles O'Leary, U.S.V., has reported for duty to the Commanding General, Department of the Susquehanna, and is waiting orders. Surgeon G. W. Hogeboom, U.S.V., having closed General Hospital No. 5, Nashville, Tenn., will report to Surgeon Glover Perlin, U.S.A., Medical Director, Chattanooga, Tenn.

Surgeon N. R. Derby, U.S.V., has been transferred as Surgeon in Chief from the 6th Division to the 3d Division, 16th Army Corps, Vicksburg, Miss.

Surgeon William Varian, U.S.V., has been relieved from duty at Bridgeport, Ala., and ordered to report to the Assistant Surgeon-General at Louisville, Ky., who has assigned him to duty in charge of U.S. General Hospital, Camp Dennison, Ohio.

Surgeon N. P. Rice, U.S.V., on sick leave at New York, has been ordered before the Board for the Examination of Sick Officers at Annapolis, Md.

In addition to his duty at the Military Prison, Assistant Surgeon S. S. Shultz, U.S.V., has been assigned as Post Surgeon at Camp Chase, Ohio.

In compliance with the request of the Assistant Surgeon-General, Surgeon Henry S. Hewitt, U.S.V., has been relieved from duty in the Department of the Cumberland, and has reported at Knoxville, Tenn., as Medical Director, Department of the Ohio.

Surgeon A. J. Phelps, U.S.V., has returned from leave of absence, and resumed his duties as Medical Director, 4th Army Corps.

Surgeon James C. Fisher, U.S.V., has been assigned to duty as "Member of a Board for the organization of the Invalid Corps," New Orleans, La.

Assistant Surgeon Peter McGowan, U.S.V., has been assigned to duty as Medical Purveyor, Knoxville, Tenn.

Medical News.

PNEUMONIA of a grave type has prevailed in Chicago during the present season.

PROF. TROUSSEAU, now 62 years of age, has offered his resignation as Clinical Professor to the Faculty of Medicine.

SCARLET FEVER is prevailing to a fearful extent in England.

THERE are three hundred and twenty-two physicians in Chicago.

MM. CHASSAIGNAC and **HIRARD** relate instances of syphilis being conveyed by vaccination.

THE Chicago Medical College has a class this winter of about one hundred students.

A MEDICAL ASSOCIATION has been recently organized in Indianapolis.

THE Medical Department of the University of Michigan has a class of about three hundred and fifty.

THE long promised work of Prof. Wormley, of Columbus, on the Micro-Chemistry of Poisons, will be published very shortly. The engraving of the plates is almost finished.

MORTALITY IN PHILADELPHIA.—The total number of deaths in Philadelphia during the year 1863 was 15,788. Of these 743 are reported as still-born, and 825 as from the country; leaving net deaths in the city 14,220, about one in thirty-nine of the population. 8,450 were children. The largest number of deaths occurred in the month of August (2,044). The smallest number (961) in June. The deaths from consumption amounted to 1,955, one in every 289 of the population. There has been a decrease of scarlet and typhoid fevers. Cholera infantum increased 301 over the previous year, and there is also an increase of 109 deaths from diphtheria.

CAUSES OF HYDROPHOBIA IN DOGS.—M. Leblanc considers the restraint from sexual intercourse as one of the efficient causes of hydrophobia in dogs. He adduced, in support of this old theory, cases collected on a portion of the shores of the Danube; on one side of the river the Christians have none but male dogs, whereas on the other the Turks leave the animals of both sexes in a state of absolute freedom. On the Christian shore rabies is frequent, and entirely unknown on the opposite bank. Likewise in France, according to MM. Leblanc and Lafosse, the animals most liable to the disease are those which are most closely confined.

MORTALITY IN PROVIDENCE, R. I.—There were 115 deaths in Providence in the month of January, which number was 39 more than in January, 1863, and 34 more than the average

for January during the nine years, 1855 to 1863 inclusive. The mortality in January was unusually large, and, considering the small number from zymotic diseases, was remarkably large. Of the 60 decedents of American parentage, 16, or more than one-fourth, were over 70 years of age; 29, or nearly one-half, were over 40 years of age; and only 13, or 21 per cent., were under 5 years. Of the 55 decedents of foreign parentage, 27, or nearly one-half, were under 5 years. Of the whole number, 115 deaths, 44 were from diseases of the respiratory organs, to some extent, perhaps, the effects of the mild and damp weather of the past month.

EDWIN M. SNOW, M.D., *City Registrar*.

ANTIDOTES FOR STRYCHNIA.—Prof. Ranieri Bellini, after having made a great number of experiments on poisoning by strychnia and its salts, believes that tannic acid and tannin, chlorine, tincture of iodine and of bromine, are the best antidotes. "Chlorine," he says, "neutralizes strychnia, even after it has been absorbed; for with rabbits poisoned by sulphate of strychnia, and to whom he gave a large quantity of chlorine-gas to breathe, the convulsions were later and less violent when they showed themselves, and death took place less rapidly." M. Bellini has also observed that when strychnia is mixed with pyrogallol acid, the convulsions do not appear for half an hour later than usual; but he attributes this effect to an action of the acid on the mucous membrane of the stomach, by which action the absorption of the poison is rendered more difficult.—*Annali di Chimica and Gazette Hebdomadaire*.

MORTALITY IN LONDON.—In the week that ended Saturday, January 9th, the deaths registered were 1,798; in the week ending January 16th, they were 2,427. The average number in the ten corresponding weeks of the years 1854–63 was 1,409, which, if raised in proportion to increase of population, becomes 1,550. Hence, the deaths of last week exceeded the estimated amount by 877. These persons were killed almost suddenly by the cold wave of the atmosphere. In comparing the present results with those of the previous week, a great increase is apparent in diseases of the respiratory organs. Fatal cases of pneumonia rose from 91 to 156; of phthisis (or consumption), from 194 to 235; of bronchitis, from 326 to 543. Of the 2,427 persons who died, 818 were under 20 years of age, 800 were 20 and under 60 years, and 809 were 60 years and upwards. Taking the numbers living at the respective ages into account, it appears that, while persons at all ages have suffered, the severity of the weather has been particularly fatal to persons in advanced life.—*Medical Circular, from Registrar-General's Weekly Return*.

SIMPLE DRESSING FOR RECENT BURNS.—One great objection to the time-honored application of the "Carron Oil" (mixture of linseed oil and lime water), is its offensive odor; besides, it does not always afford sufficient relief from pain to enable the patient to sleep. In preference to this, a writer in the *Amer. Journal of Med. Science* recommends in recent burns the application of fresh lard. What is wanted, is to cover the part with a bland, unirritating, and air-proof medium, and this we have in lard, which can always be procured, and, if salted, may be deprived of the salt by washing it with water. His plan is to spread the lard thickly on pieces of very soft old linen, and then tear off pieces of suitable size to cover the affected parts. If the weather be very warm a little simple cerate may be added—about one part to four or six of the lard. It should be so applied as to accurately fit all parts of the denuded surface. The writer feels confident that whoever gives the lard a trial will not be disappointed in its results.

DR. SQUIBB highly recommends as an application in these cases, the creasote water, made according to the new U. S. P., as follows:

Take of Creasote, a fluid drachm;

Distilled water, a pint.

Mix them, and agitate the mixture until the creasote is dissolved.

Original Lectures.

LECTURES ON GUNSHOT INJURIES OF THE CHEST.

By FRANK H. HAMILTON, M.D.,

PROF. OF MILITARY SURGERY AND FRACTURES AT BELLEVUE HOSP. MED. COLLEGE, AND LONG ISLAND COLLEGE HOSPITAL; SURGEON TO BELLEVUE HOSPITAL; LATE MEDICAL INSPECTOR, U.S.A.

LECTURE III.—PART I.

GENTLEMEN:—Gunshot injuries of the thorax may be divided into, first, non-penetrating injuries, or those in which the projectile has not entered the cavity of the thorax; second, penetrating, or those in which the projectile has entered the cavity of the thorax and remains; third, perforating, or those in which the projectile has passed entirely through this cavity.

First. Non-penetrating injuries, or those in which the missile does not enter the thoracic cavity.

A rifle or musket ball, which merely impinges upon the surface of the skin and glances off without producing any lesion of structure, is usually harmless. Unlike similar injuries of the scalp, it in general produces little or no nervous shock, and entails no serious results. If, under such circumstances, the patient looks pale and seems exhausted, these phenomena are generally due to alarm occasioned by the belief that he has received a mortal wound. At Centreville a soldier requested me to examine his back, through which he said a ball had penetrated. He had walked from the field and looked pale and exhausted. Upon examination, I found a discolored spot which he indicated as the seat of the injury, but no wound. He stated that the ball struck him with so much force as to make him stagger, and that he immediately experienced some difficulty in breathing, which was perhaps in part caused by the alarm, and in part by an injury to some small nerves. Occasionally, however, the shock produced by a musket ball is sufficient to cause a rupture of some of the more superficial pulmonary vessels; and in other cases it gives rise eventually to pleuritis or even pneumonia.

Guthrie relates, that on the 17th of August, 1808, when the army under Wellington was about to ascend the heights of Rolicca, a soldier received a ball upon his buff-leather belt on the right breast. The noise made by the blow was quite audible. Mr. Guthrie saw the man fall, and supposed he was killed; the ball had, however, only gone through his belt, and made a mark on his chest over the cartilage of the fourth rib. He recovered in a short time, spat a little blood in the night, and, after a large bleeding, was enabled to accompany the troops on the 20th, ready for the fight the next morning.

A solid shot, or the convex surface of the fragment of a shell, may impinge upon the thorax, and, without causing any rupture of the skin or anything more than a slight abrasion, it may fracture the ribs, rupture the lungs or some of the large bloodvessels, or even tear open the heart itself, and thus cause almost immediate death. In these cases the injury resembles those crushing accidents which often occur in civil life; and the fatal internal lesions are produced rather by the weight than by the momentum of the projectile. The ribs, with their cartilages, are bent inwards violently, and made to encroach very far upon the contained viscera before they break, and serious lesions may be produced before the bony parietes are fractured; but when at last the ribs themselves are broken, their ragged extremities are thrust violently inwards, and the internal lacerations are rendered more extensive.

McLeod mentions the case of a soldier who was hit by a round shot on the edge of the breast-plate, which was so turned in as to fracture the cartilages of the fifth, sixth, and seventh ribs on the left side, close to the sternum. The skin was not wounded. He walked to the rear, and com-

plained but little for two hours, when he was seized with an acute pain in the region of the heart. His pulse became much accelerated, and he grew faint and collapsed. A distinct and sharp bellows-sound accompanied the heart's action. He died in seventy-two hours from the receipt of the injury, the pain and dyspnoea, which had been so urgent at first, having abated for some hours before death. The heart was found to have been ruptured to an extent sufficient to allow of the finger being thrust into the left ventricle. The obliquity of the opening had prevented the blood escaping into the pericardium, which contained about two ounces of dark-colored serum.

The elasticity of the ribs is such, also, that solid shot frequently tear off the flesh extensively, uncovering the ribs over a space of several inches without producing a fracture.

In several instances I have seen the side of the thorax covered with a dark-colored eschar caused by a solid shot, but in which cases the destruction of tissues extended no deeper than the integument. On the night of Aug. 1, 1862, while Gen. McClellan's army lay encamped at Harrison's Landing, the enemy commenced a brisk cannonading from the opposite shore of James river, throwing shells, round and conical shot, and red hot shot into the fleet of transports, and into the densely crowded encampment of the troops along the shore. Among the casualties which came under my notice during the night and morning was a chest wound of the character which I have mentioned. The man who had received the injury was a private, belonging to the Fourth Pa. Cavalry, and the shot had taken effect upon the left side of the thorax, over the fifth, sixth, seventh, and eighth ribs. A surface about the size of my hand was covered with a dark-brown eschar, but none of the ribs were broken. He was knocked down by the missile, and was for a moment unconscious. Several days later I found him still in bed, feeling very weak, and complaining of a burning pain in the eschar, but no symptoms had supervened indicating the occurrence of any internal injury.

Round balls have been frequently known to penetrate beneath the integuments, and pass around the outer circumference of the chest for a greater or less distance, escaping finally at a point so remote from the point of entrance as to have led to the belief that the ball had passed directly through the cavity of the chest. It is supposed that the force of these balls must have been nearly expended before coming in contact with the body, and that they struck obliquely; which circumstances, together with the remarkable elasticity of the bony parietes of the thorax, will sufficiently explain the eccentricity of their course. In some examples the ball, having entered near the centre of the thorax in front, has escaped directly opposite, near the spinal column; indeed, the projection of the spinous processes of the vertebræ generally determines the extent of the circuit in this direction, the ball being at this point either arrested and remaining lodged beneath the skin, or deflected towards the surface and making its escape.

Conical balls, as we have already stated in our general remarks, are much less liable to be thus deflected, nevertheless we still continue to meet with similar accidents occasionally.

The following examples will illustrate some of the many varieties of gunshot wounds of the thoracic walls produced by bullets:

A private in the 40th N.Y.V. was wounded at the battle of Williamsburg, Va. on the 5th of May, 1862, by a ball which entered obliquely on the left side, near the junction of the eighth rib with the sternum, and passed downwards and forwards towards the ensiform cartilage. The track of the ball, as far as it could be traced, was superficial, but it has never been found. At the expiration of eighteen months the wound remains fistulous.

Wm. H. Hatchett, a private in the 13th N. C. Regt. (Confederate), was wounded at the battle of South Mountain, Md., on the 14th of Sept. 1862, by a conical rifle ball, which entered the fore-arm, and, passing out near the elbow, again penetrated the arm, breaking the humerus, after

which it entered the side of the thorax, and made its final exit through the lower angle of the scapula. I saw this man a few days after the battle, at Frederick City, Maryland, and found no evidence of internal thoracic injury. His condition seemed to promise a speedy recovery.

H. P. Robinson, a private in the 5th Pa. Cavalry, received a pistol-shot in the back of his thorax in a skirmish with the enemy at Williamsburg, Va., on the 9th of Sept., 1862. The ball entered over the right shoulder, and, passing backwards, penetrated the scapula from its venter towards its dorsum, and was found lying beneath the integuments near the spine. It had not penetrated the thorax. I removed the ball by a counter-opening, and, upon introducing my finger into the wound in the direction of the scapula, the track was discovered to be filled with very small spiculæ of bone, most of which I was unable to remove. The wound was left open and a poultice applied to encourage suppuration.

I will next consider *perforating gunshot wounds of the thorax, or those in which the projectile has passed entirely through the thoracic cavity.*

We include in this division not only those accidents in which the perforation is complete, the ball having escaped through the opposite integuments by its own momentum, but also those in which the ball, having traversed the thoracic cavity, is found lying more or less superficially outside of the thorax, in a position from which it may be easily removed by the surgeon.

Perforating gunshot wounds of the chest present the widest range of prognosis, according to the direction which they have taken and the particular viscera which have suffered lesion.

Wounds of the heart and of the large bloodvessels are in general immediately fatal. We are seldom in a position to witness the death of a man who has been shot through the heart, but I have had one unusual opportunity of witnessing the death of a soldier whose heart had been penetrated by bullets.

While the army of the Potomac was encamped in front of Alexandria, Wm. H. Johnson, a private in the 1st N. Y. Vol. Cavalry, was shot for desertion. The execution occurred on the 13th of Dec., 1861, and I was stationed with Gen. Franklin and his staff only a few yards from the culprit. The detachment of soldiers by whom the sentence was carried into execution consisted of twelve men, and was divided into two squads, composed respectively of eight and four men, the latter being held as a reserve. The arms used were Sharp's carbines, loaded with conical balls. The distance was five paces. At the first fire four balls entered his chest, three penetrating the heart. The remaining balls did not take effect. After he was shot, during a period of two or three seconds, he sat motionless, and then fell slowly over to one side and to the ground. At this moment a slight convulsion passed through his frame, and the officer in command, supposing that he was not fatally wounded, ordered the reserve to fire, and their balls were found subsequently to have penetrated the face and head. I immediately rode to him and ascertained that he had ceased to breathe and was pulseless. He was dead. It is probable that the three balls which penetrated his heart, and which, as the autopsy showed, had lacerated it freely, produced death in less than five seconds.

(To be Continued.)

RESECTION.—The German naturalists have been engaged in discussing at Stettin the subject of *resections*. Bardeleben explained at length the method of operation. He eulogized the plaster bandage in the after-treatment, and dwelt upon the following important points for the success of the operation:—1st. None of the capsule of the joint should be allowed to remain. 2d. The after-treatment must be carefully and minutely attended to. A plaster bandage strengthened by strips of wood is best adapted to this purpose, and it should be water-tight, so that the water-bath may be employed.—*Med. and Surg. Journal.*

Original Communications.

CASE OF EXTENSIVE FRACTURE OF SKULL, WITH LOSS OF CEREBRAL SUBSTANCE, &c.—RECOVERY.

BY THE LATE FREDERICK G. LE ROY, M.D.,

OF TARRYTOWN.

WITH THE OBITUARY NOTICE OF THE AUTHOR.

By F. D. L.

THE rough notes of this case were found among Dr. LeRoy's papers, from which this history has been prepared; and it is presented to the profession as one of those remarkable instances which we occasionally meet with, of recovery from apparently hopeless injury of the head; crushing of the *calvarium*, laceration of the *dura mater* and brain, with loss of cerebral substance, and with every indication also of fracture of the *base*; the symptoms, during the progress of the case, alternating, in a rather remarkable manner at intervals, between favorable and unfavorable, until finally the powers of nature, aided by the close attention and skill of the surgeon, triumphed.

Case.—Harry Schubert, 12, having climbed a chestnut-tree, Oct. 7, 1861, fell to the ground, striking on his head. Upon visiting him, found that he had sustained a compound fracture of the skull, involving portions of the left occipital, parietal, and temporal bones. The scalp was lacerated to a considerable extent. There was also a fracture of the lower jaw. There was hæmorrhage from the wound, and also from the left ear. He was in a state of collapse, breathing heavily; left pupil dilated, right contracted; pulse 62. Having made the necessary enlargement of the scalp wound, I proceeded to remove a number of loose fragments, which readily came away in pieces varying in size from an inch to an inch and a half square. The whole loss would probably amount to four or five square inches. The trephine was not used, but only the saw and elevator. The *dura mater* was lacerated to the extent of an inch and a half; the brain protruding, and small portions flowing away with the blood. Having cleansed the wound, the cut edges were approximated by sutures, and the part dressed with lint wet with cold water. Pulse ranged from 62 to 164; gradually fell to 72. During the first night there was a succession of slight convulsions. Bladder relieved by catheter. For a few hours stimulants were required.

October 21st.—During the last two weeks nothing remarkable has occurred. Has never been perfectly conscious; wound looks well; water-dressing continued. Has been taking *pulvis antimoniæ* and *magnes. sulph.* Bowels rather constipated, sometimes requiring enemæ. Pulse has sometimes ranged, during twenty-four hours, from 72 to 135. Catheter was required for four days. To-day pulse 68; symptoms unfavorable; flashes of heat and cold; mind confused. Takes beef-tea, eggs, rice, gruel, etc. Oct. 23d.—Quite rational; free discharge of serum from left ear; pulse 78, soft; relishes his food; wound looks well; has healed, except where badly lacerated. Oct. 27th.—Condition unfavorable; comatose, with heat of skin; frequent and feeble pulse; pupils inactive. Oct. 28th.—No better; refuses food. Oct. 30th.—Better; had a good night; no fever; pulse good; appetite has returned; nourishing diet continued. Nov. 3d.—Improving rapidly. Nov. 10th.—Bowels constipated; mind not clear, cannot call objects by name. Dec. 1st.—Since last date the progress of the cure has been uninterrupted, and patient is now out of danger. At this date, Feb. 10th, 1864, this patient is at school at Sing-Sing, but is represented as "not bright."

The injury sustained by this boy, and which resulted so fortunately, was very similar to that which recently deprived his surgeon of life in the full enjoyment of health, and of a successful professional career.

In December last, while riding his rounds in the village of Tarrytown, Dr. LeRoy's horses took fright and ran away,

throwing him from the carriage, his head striking with great force against the hub of the wheel of another vehicle. Two of his professional friends, Drs. Caruthers and Scribner, of Tarrytown, were soon with him. They found him perfectly unconscious, and very restless. The blow had been received on the *vertex*, which was literally crushed in by the iron ring on the hub; the *dura mater* and brain lacerated, and the fracture extending in various directions towards the *base*, which was probably also fractured, as there was abundant hæmorrhage from the left ear. The left eye protruded somewhat, and there was extensive ecchymosis on the left side of the forehead. His medical attendants were painfully conscious that the case was a hopeless one, and that the profession, which he had so successfully practised for the benefit of others, and of which he had been a bright ornament, could do nothing for him. He lingered in a perfectly insensible condition, and very restless, for about twenty-six hours.

Dr. LeRoy was one of those cheerful, frank, high-toned gentlemen, who at once impressed every one favorably with whom he came in contact. He at once won friends wherever he went. He was one whose intimate friendship was a valuable possession; and, as the writer of this notice enjoyed, for a number of years, this possession, he feels it both a professional and friendly duty to pay this slight tribute to his memory. During a professional career of some years in Tarrytown, his intercourse with his brother physicians, as I am assured, was never marred by one unpleasant occurrence, social or professional. Their relations were always happy; and there is every reason to believe that no one, apart from his own family, was more sadly impressed with the painful accident which so suddenly deprived them of a friend and brother.

February 15th, 1864.

CASE OF MALINGERING.

By DEWITT C. PETERS, ASST.-SURG., U.S.A.

SURGEON-IN-CHARGE OF JARVIS GENERAL HOSPITAL, BALTIMORE, M.D.

PRIVATE T. F., a cavalry soldier, aged twenty-five years, was transferred to this hospital from Camp Tyler, Baltimore, to be examined (as he said) for a discharge from the service. The man stated, that he had enlisted about six months since, and that soon afterwards he was attacked with rheumatism, which completely disabled him before he had performed any field duty. On admission into the hospital, it was noticed that he was in robust health, otherwise than certain deformities, which at first inspection were thought by his medical officers to be feigned. He was watched closely for several days, and placed under the use of placebos, but nothing was noticed in his conduct whereby the fraud could be detected. The truth is, that after four months' experience, the man was pronounced a perfect adept in the art of malingering; and, in my connexion of several years with soldiers, I had never seen a case where the deception was acted with more thorough cunning. His arms and hands were contracted across his chest, were very much distorted, rigid, and presented a pitiful appearance to the beholder. The man's physiognomy resembled that of a mendicant when plying his vocation, and any attempt to overcome the rigidity of the upper extremities, increased these indications of suffering. The case afforded no explanation nor satisfactory conclusion under the treatment above mentioned; therefore I confronted him with the charge of feigning rheumatism, and strengthened the accusation by informing him there were no local symptoms present which would warrant the belief of his ever having had the disease. Finding neither persuasion nor fear could overcome his determination to carry out his purpose of gaining his discharge, perhaps with the idea of again imposing on the government by reenlisting in some distant section of the country where he could obtain another bounty, I resolved to resort to other means. Against his inclination, the man was carried to

the operating room of the hospital, and, in the presence of several officers, an anæsthetic (sulphuric ether) was administered to him. While yielding to the powerful influences of the remedy, it was noticed that he endeavored, through the aid of his will, to retain his fingers, hands, and arms in the deformity they had assumed; but in doing so, he unconsciously moved the parts, and fully exposed the deception. When fully etherized he became perfectly relaxed, and then not the least ankylosis nor contraction (of a permanent nature) could be detected. The sponge was removed, and the man allowed gradually to regain his senses; but before he was fully conscious of what was occurring about him, he was placed upon his feet and exercised in the manual of arms by the officer commanding our invalid company. In this condition he found himself on gaining the full control of his mind. He was kept at this drill for one hour or more in the presence of many of the convalescents of the hospital, who were highly indignant at his past conduct, but who enjoyed the treatment. His cure was now completed by giving him a cold bath, and he left the hospital with perfect use of all his limbs, and with a lesson taught him which may have its moral effect.

Remarks.—Sulphuric ether is a most valuable remedy in detecting various diseases simulated by soldiers. Its slow and insidious action enables the surgeon to easily detect the feigned deformity or sickness. In aphonia, chronic rheumatism, ankylosis, incontinence of urine, and numerous other complaints the soldier selects often to deceive his medical officer, the exposition under its influence is complete, and hence its advantage over chloroform, the action of which is too sudden and dangerous to be employed with impunity.

THE HISTORY OF A REMARKABLE

CASE OF HEMIPLEGIA AND ANASARCA.

By E. P. METCALF, M.D.,

OF GENESEE, N.Y.

THE history of the following case embraces a period of nearly forty years. In sketching it, I must depend entirely upon memory, and shall be unable to give minutiae, not having reference to any notes whatever.

The first that I heard of Mary Lindsley was, I think, in 1830, through Dr. Stillwell of Livonia, Livingston Co., N. Y. The doctor told me that he had a case of paralysis of the right side, in an unmarried woman of about 30, of four years' standing; that she was wholly unable to use the arm and hand, or the leg, in walking; that she was otherwise healthy; was very ingenious in the use of the needle, which she used with the left hand, pinning her work to the helpless right arm, which was carried in a sling; that she was a smart, intelligent woman, and very desirous of being cured. He also said that he had learned from Mary that several years before she had an abscess of the right side, pronounced by Dr. Daniels, an intelligent physician, who attended her, to be hepatic; that it was laid open and continued to discharge for a long time; finally healing, when she became very well and taught school, until stricken down suddenly with paralysis. Dr. Stilwell was deeply interested in the case, and inquired of me as to the best mode of treatment. I had shortly before seen in the *Am. Jour. of Med. Sciences*, an article from the pen of Professor Dickson, of South Carolina, on the treatment of paralysis, in which he gave several cases, with his mode of treatment, which consisted substantially of strychnine (then quite a new article). He put 6 grs. to an oz. of alcohol (by-the-by, a bad solvent, but I did not know it then), and began with six drops, repeated every few hours; gradually increasing the number of drops, until some visible effect was produced.

Dr. Stilwell adopted Prof. Dickson's plan, and at once commenced the treatment of his patient. In a few weeks, I learned that after taking the strychnine for some days in gradually augmented doses, she was seized with spasms of

the affected side, which continued for several hours. When they subsided, the Dr. thought there was a slight improvement, and urged the continuance of the medicine, seconded by Mary herself, though in violent opposition to the wishes of her friends, who were apprehensive that the poisonous stuff would kill her. The treatment was persisted in, every few days producing the spasms, when for a day or so it was discontinued. In a few months she was very perceptibly better, being able to walk pretty well; and had partially recovered the use of the arm and hand. At length she became so much better, that the strychnine was only given occasionally, when she had "run down." The following year she came to Geneseo, and placed herself under my personal observation and care. I found her a large, well developed, strong, healthy woman. The paralysis, to a great extent, was *apparently* gone; but *really*, as I was told, she had to be "wound up" by strychnine every three or four weeks. At the time I first saw her, I was informed that *all* of the functions of the system were in regular healthy operation. I anxiously awaited the time when it would be necessary "to wind her up." The first indication of such a necessity appeared in an awkward, imperfect use of the hand, arm, and leg; she hobbled rather than walked; her hand was of a purplish color, and moved with difficulty; she was unable to grasp anything; occasionally an electric rigor would pass over her; her speech was also impaired; if the hand was taken, and moved with a quick motion, as if shaking hands, it became very painful; all its motions were imperfect, constrained, and awkward. She said "it had the blues," and always acted so when she required the strychnine. I had been informed of the way she would "cut up" when under the operation of strychnine, and now, anxiously, was about to witness the "performance."

By this time she had become so accustomed to taking the strychnine, that she knew the required dose, which was administered. In a few minutes after taking it, a convulsive rigor passed over her, producing an impatient scream. She was irascible and snappish. In ten or fifteen minutes she had a sharp convulsion, and then fell asleep in her rocking-chair. Her sleep was very profound. Now came the tug of war. I had learned how she was to be awakened. A 64-pounder, or any other large gun, would be let off to no purpose with her. Nothing but a persistent pull of the palsied arm, having hold of the hand, and at the same time pressing upon the ulnar nerve, would awaken her. After letting her sleep for some fifteen or twenty minutes, I pulled at the arm and pressed upon the nerve, as directed. In a short time there was a tremor of the hand and arm, and then a scream. I knew what was coming, and slipped behind her, still having hold of the hand, and still manipulating. As soon as I perceived that her eyes were opening, I darted out of the door, which I took good care should be in the rear; thus making my escape into another room, without being seen by her, and holding fast the door upon the other side. Lord, what a storm there was! She was a perfect fury, scolding with all her might. There were a number of ladies and gentlemen in the room, quietly seated. I could hear her storming at them for letting somebody hurt her. If she suspected any one present, the kicks and blows, which she was sure to bestow, were anything but pleasant to the unfortunate recipient. In short, she was mad in the true sense of the word—she was sadly deranged. In a short time, when the fury of the storm had abated, I re-entered the room. She looked sharply at me, and then "blew me up" for being away so that somebody could hurt her. I was very sorry that anyone had injured her, and in a few minutes succeeded in soothing her. By-the-by, in order to control her, it was necessary for her to regard me as her friend, who would not "hurt" her. So the hasty exit from the room, as she was awakening, was a necessity. She soon became pleasant, and desired me to give her something to drink "that was good." A little wine and sugared water set all things right. She became very loquacious and happy, keen, and often witty. What she said was as sensible and as consecutive as what she uttered

at any other time. I found that she would often refer to persons, without naming them, who were present at previous times, and to matters of which I was entirely ignorant. She had no recollection of any event, unless it had come under her observation while in this condition. For the many years that I have attended her since, I never knew her on these occasions to pronounce the name of any person. The reference she made would be to *him* or *her*; and if we were unable to divine *who*, and name the person, she would become impatient, and not unfrequently abusive. When the name was called, she recognised it instantly, and became satisfied. She seemed utterly unable to pronounce a proper name. In about an hour after being awakened, she was in "high feather." She was then in a poetical mood, and pen, ink, and paper being given, she would perpetrate some verses, generally of a religious character, written with the left hand—and which, by-the-by, were not, in my judgment, of a very high order. After some three hours, spent very happily, and a portion very gleefully, she became sober and moody, and soon after again went to sleep in her chair.

This time she would be awakened with much less difficulty, and be rational when she awoke. 'Such was the programme, and so I found it. She yawned, rubbed her eyes, and inquired how long she had slept, and how she had behaved? She had not the faintest recollection of anything that had occurred. In a few minutes that electric shudder and short scream recurred, with a little spasmodic action of the muscles of the hand, arm, and leg; the flexors and extensors alternately and rapidly contracting. The tragic part of the play was now about to commence. The spasmodic action grew more and more violent, the arm and leg moved rapidly, the mouth and eyes were drawn to one side, respiration was accelerated, the whole right side was in commotion, the spasms became vehement, the whole frame shook, she lapsed into unconsciousness, the mouth and face became greatly distorted—when suddenly, after all this had continued from three to five minutes, her arms fell down, the head fell back, the eyes closed, and the breathing was entirely suspended. The faintest pulsation of the heart alone, showed that life was not extinct; pulse there was none. Cold water, violently and repeatedly thrown from a tumbler, especially when made to hit her over the mouth, was the grand restorative. A very forcible and exact hit would cause a sudden inspiration, and a faint scream. When this occurred, the danger was over. In ten or fifteen minutes Mary was herself again, though complaining a good deal of soreness of the arm and leg of the affected side.

I have described, as nearly as I can, one instance of the "winding-up" of Mary Lindsley by strychnine. I am not able to daguerreotype its comical or tragical characteristics. The way to know about Mary at such times, was to see her. I gave the medicine and attended her for many years; at first once in three or four weeks, then in six or eight, then two or three times a year; always with the same unvarying train of symptoms. In a couple of days after taking the medicine, she would be "as smart as a whip," and became the village upholsterer, mattress maker, lounge stuffer, carpet maker, etc. She had a great deal of muscular strength, and when any of our housewives had a heavy carpet to repair and put down, Mary was the very person of all others to do the job.

For some ten years past, she has taken no strychnine to my knowledge, though she used morphine liberally every day. Her paralysed limbs appeared perfectly restored, or nearly so. At times she had her complaints, though palsy was no part of them. I omitted to say that acetic acid or strong vinegar instead of alcohol, was used for the last twelve or fifteen years, as the strychnine would entirely dissolve in either. Twelve grs. to the oz. was the strength of the solution, and from twelve to twenty drops was a sufficient dose. The doctors in the vicinity, and a great many other persons, would beg to be informed when Mary was next to take her medicine; so that on such occasions there would be a grand exhibition. I recollect that on one occasion the

late Prof. James Webster, of Rochester, was present, and witnessed the performance with profound interest. He was sure she would die during the final stage, declared he could not endure it, and took an abrupt departure. I was not in the habit of telling doctors how she acted when awakened in the *mad fit*; and when I made my sudden exit, would leave some doctor hanging over her and eagerly drinking in all the strangeness of the case; suddenly she would pounce upon him, pull his hair, kick his shins with the left foot, and hammer him with her left fist to her heart's content, and to his dire amazement. That was the initiation fee. None but doctors had to pay it.

Some seven or eight years ago she was taken ill, but how, or of what she complained in the early stage, I can't tell. She was then, I believe, under the care of Dr. Lauderdale of this village. I know this: that I saw her occasionally, and found she had anasarca, her limbs and body being much distended with water; that the pulse was small, irregular, and intermittent; and that she was supposed to be laboring under an incurable disease of the heart. I recollect on one occasion to have taken the late Dr. McIntyre, of York (who was an eminent physician and an honor to the profession), to see and examine her. He made a careful examination, thoroughly explored the chest, and gave it as his opinion that she had disease of the heart, which would probably terminate fatally. In a short time the skin became enormously distended, and I proposed, and did puncture it a little to give egress to the fluid. She was impatient of the puncturing process, and it was not carried far enough to do any good. In a few days the distension was so great, that I thought the skin must burst, and then there came on an intolerable itching over the entire body. Scratch she would, and scratch she did. That proved more effectual than puncturing. The skin was very extensively broken over the body and limbs, and from this entire excoriated surface there was a great discharge of water. Folded sheets were placed around her to absorb the discharging fluid, but they were soon saturated; the entire bed was saturated, and a wash-tub was finally placed under it, to receive the copious flow of water. The swelling of the body and limbs pretty much disappeared in the course of twenty-four hours, and Mary soon began to "pick up her crumbs" again. I recollect that during or after this enormous anasarca enlargement, she took freely of a decoction of the root of *milk weed*, which she thought, and I thought, largely increased the urinary discharge. Shortly after this, and as soon as she was able to bear the fatigue of a removal, she went to Rochester, an inmate of a benevolent institution there—"The Home of the Friendless." I know but very little of her since. I have heard, however, that for several years she enjoyed tolerable health, and did more or less upholstering for the establishment. She died in December, 1863.

In giving this outline (and it is nothing more than a bare outline) of the case of Mary Lindsley, I am sensible that I have very imperfectly accomplished the task. Her case is in fact a very interesting and important one.

Autopsy made by Dr. Thomas Arner, Rochester. "The heart was hypertrophied, exactly how much we had no means of ascertaining—should say twenty ounces; no evidence of pericarditis or of endocarditis; valves all healthy, except a trifling insufficiency of those of the pulmonary artery; no evidence of fatty degeneration; the right ventricle was full of colorless clots (emboli as they are called) which extended a short distance into the pulmonary artery. These were doubtless the *immediate* cause of death; that is, if we accept the latest theory of the profession about them. The lower portion of the left lung (half the lobe) was a mass of tubercles; the apex of the lung contained but little tubercle, but gave evidence, in a large cicatrix, of previous deposits and softening; no pleuritic adhesions; the right lung was a mass of tubercles from top to bottom, with very little healthy portion, only lying posteriorly and confined to the middle and upper lobes. It was firmly attached throughout (except the healthy parts) to the dia-

phragm and costal walls. These adhesions were evidently of long standing, and the result of extensive pleurisy; the liver was healthy, and gave no evidence of former disease; no adhesions. No other organs of the body were examined.

"I was not prepared to find so extensive disease of the lungs. I had doubts about the existence of much, if any tubercles, and I was equally unprepared to find so little disease of the heart. Basing my diagnosis on the symptoms and previous history of the case, I expected to find extensive organic disease of this organ. A great error I fell into, you observe. I think you will agree with me in saying that the hypertrophy was secondary to, and depending upon, disease of the lungs (impeded circulation) as the cause of it. It is wonderful that she has lived so long, and gives us something on which to build a hope, even in *consumption*. There are some points in the history of her long-continued illness that are not clear to me, and upon which I would like some information. Can you tell me whether she really had inflammatory rheumatism a number of years ago; and when it was that she began to show symptoms of cardiac disease? To what was the dropsy attributable which she had some years ago, and did she have an abscess on the right side supposed to communicate with the liver or pleural cavity?"

THOMAS ARNER."

A letter containing the above post-mortem account and inquiries was addressed to Dr. Lauderdale, who, not being so conversant with the entire history of the case as myself, handed the letter to me, with a request that I would comply with Dr. Arner's wishes.

Remarks.—There are some points about this case of especial interest.

1st. That abscess which was pronounced to be of the liver. As Dr. Daniels, who then attended her, has long been dead, no person living can probably throw any light upon it and its surroundings. From what I had heard, I supposed that it was a hepatic abscess, and expected that some trace of it would be found upon an examination after death. It seems that the "liver was found healthy, and gave no evidence of former disease."

2d. If the abscess was of the lungs or of the thoracic cavity, why were there not more evidences of its having been there disclosed on the post-mortem examination?

3d. Was there any relation between the abscess, or its drying up, and the hemiplegia? She thought there was.

4th. So far as I know, where strychnine is found useful in paralysis, its long-continued repetition is not called for in the way it was found necessary in this instance. Patients, when benefited by it, are usually "wound up" for good. In this case, without its occasional repetition for long years, she would doubtless have relapsed to utter helplessness.

5th. Metaphysicians may perhaps explain her uniform craziness or madness, upon her first awakening after taking the strychnine; I cannot. She had two distinct mental existences, if I may so express it (she used to say that she had two souls; for aught I know she had *three*, for she was a great riddle), the one normal, and the other, what? not hallucinatory, because the operations of her mind were carried on perfectly; though never trenching upon, nor having the least cognisance of what passed through her mind in its normal conditions. This to me has always been full of interest, and is altogether inexplicable. Ah, we don't know yet all about that wonderful organ, the brain. The most difficult part of the description of the case is to portray the workings of her mind, and her conduct when under the first influence of strychnine, *so that others can see it as it was*. The portraiture is impossible.

6th. There is novelty to me in the mode nature adopted to rid the system of that vast accumulation of water. The kidneys were entirely unable to carry it off. The use of the milk weed was of great service. While using it, she urinated a great deal more than when not using it. As a domestic remedy in exciting the action of the kidneys, I know of nothing that equals it.

7th. The autopsy disclosed incomparably less difficulty of

the heart than I expected. I never knew of her having had rheumatism.

8th. I was astonished to learn that the lungs were so tuberculated. Mary always had a cough and expectorated freely; but the sputa never appeared to be of a purulent character. The examination disclosed that the right lung was firmly attached throughout (except the healthy parts) to the diaphragm and costal walls. These adhesions were evidently of long standing, and the result of extensive pleurisy. Is it not probable that that mysterious abscess originated in this part, and these adhesions walled it up?

GENESEO, N.Y., December, 1863.

P.S.—I forgot to mention that at one time, many years ago, Mary's paralysis was transferred to the œsophagus, which for weeks incapacitated her from swallowing food or drink. She was nourished by the stomach-pump, and finally cured of that phase of the disease by having the strychnine pumped into the stomach. Then she went through the usual course of "winding up" symptoms, and came out all right, so far as swallowing was concerned.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, Oct. 25, 1863.

DR. D. S. CONANT, PRESIDENT, IN THE CHAIR.

LIGATURE OF THE LEFT SUBCLAVIAN INSIDE THE SCALENUS MUSCLE, TOGETHER WITH COMMON CAROTID AND VERTEBRAL ARTERIES, FOR SUBCLAVIAN ANEURISM. HÆMORRHAGE FROM THE DISTAL END OF THE SUBCLAVIAN—DEATH ON 42D DAY.

DR. PARKER presented a specimen of subclavian aneurism of the right side, which he had removed from the body of a man with the following history:—During the month of August, 1862, a swelling about the size of a walnut made its appearance without assignable cause above the centre of the patient's right clavicle. It did not increase for a period of seven months, when it began slowly to enlarge, so that at the end of a year, when Dr. Parker was first consulted, it had attained the size of a hen's egg.

The diagnosis of aneurism was at once made, and the patient was advised to remain for some time quietly at home, take no violent exercise, and live upon vegetable diet. When he was next seen the tumor had increased somewhat in size, and by pressure upon the axillary plexus had given rise to considerable pain in the arm of the affected side. He was advised to submit either to the operation of ligation of the subclavian artery with its uncertain results, or to amputation at the shoulder-joint. At the end of four or five weeks the patient again presented himself; the tumor had then very much increased in size, and he was suffering extremely from pain in the right arm. He was then admitted (September 2, 1863) to the New York Hospital. His nights were sleepless, and there was a very singular change in his circulation. When last seen, the pulsations in each wrist were regular, and numbered 76; now the pulsations in the right wrist could hardly be appreciated, and on the left side there was nearly the same condition of things present. The pulsation of his carotid varied from 120 to 130. A consultation, which was called, resulted in a decision to tie the common carotid near the bifurcation, and secure a good plug, and also the subclavian inside the scalenus muscle, together with the vertebral artery. It was thought best to ligate the vertebral artery in order to guard against the accident which occurred in Kearney Rodgers's case of ligature of the left subclavian in 1845. Dr. Rodgers applied a ligature just inside the vertebral artery in the first division. His patient went on very well until the fourteenth or fifteenth day, when he died of secondary hæmorrhage, the result of the recurrent circulation through the vertebral into the sub-

clavian. On the proximal side of the ligature was a well formed plug, but on the distal side there was of course no coagulum whatever.

The operation was entered upon, and the ligatures applied without difficulty. The pulsations in the tumor immediately ceased, as did also the intense pain in the arm. The case progressed exceedingly well until the tenth day, when there was a slight hæmorrhage, which, however, was easily controlled. On the twelfth day the ligature from the vertebral artery came away. September 17th ligature of carotid came away; this was followed by a slight hæmorrhage, which, however, had nothing to do with the artery itself. The ligature from the subclavian did not come away until the 26th, twenty-four days after the operation. On the 29th there was a slight and easily controlled hæmorrhage. Oct. 1st.—Suppuration from the wound was very free; although nature had done a good deal towards closing the opening the tissues gradually broke away under the influence of pressure and of the persulphate of iron which had been used to check the bleeding. Oct. 7.—Hæmorrhage to the extent of three ounces, and pretty free. In the evening hæmorrhage again, about one ounce. He rallied, however, from all this until the forty-second day after the operation, when hæmorrhage again occurred, and he died.

The autopsy was made four hours post-mortem, by Dr. Sands, assisted by the gentlemen of the house-staff. The following is his report:—

Right sterno-mastoid removed; clavicles on either side sawn across at the junction of the outer with the middle-third; and the sternal portion removed, together with the sternum, the costal cartilage having been previously divided; pericardium opened, and an incision made into the aorta, through which a pipe was introduced and water injected upwards. After a considerable quantity of water had been thrown into the vessels, some of it was seen to issue from what was afterwards found to be the distal end of the right subclavian artery; more escaping, however, from the proximal end. The water also appeared through the left internal mammary, which had been cut in raising the sternum, but more through the right internal mammary, although this had likewise been divided. The wound was deep, extensive ulceration having taken place to the right of the trachea; at its bottom was a round opening, which, upon examination, proved to be the distal extremity of the subclavian artery. The common carotid artery, internal jugular vein, and pneumogastric were matted together by inflammatory products, as were the tissues generally in the neighborhood of the wound. The carotid artery beyond the point which had been tied was occupied by a firm plug that extended nearly to its bifurcation. The proximal portion of the carotid, as well as that of the subclavian, had been destroyed by ulceration, so that the bifurcation of the innominate was no longer visible. The latter vessel presented an open mouth with jagged ulcerated edges, and was filled by a firm fibrinous plug, which occupied nearly its entire length, and projected slightly through its open extremity. The distal end of the subclavian had ulcerated away, carrying with it the proximal portion of the vertebral, the distal portion of the latter being found well plugged. Excepting the vertebral, all the branches of the subclavian were found, and were seen to have their normal relation with the main trunk. They were also pervious, as was shown by the fact that they all admitted a probe introduced through the open end of the subclavian, before described as lying at the bottom of the wound. It was evident, therefore, that the patient had died of hæmorrhage from the distal end of the subclavian, the blood having found its way into the latter by the recurrent circulation. The aneurism sac was larger than a hen's egg, and nearly filled with coagula. The axillary artery beyond the aneurism was healthy and unobstructed.

Several important morbid alterations were noticed on the left side of the neck. The left internal jugular vein was entirely obstructed by a plug of a brownish yellow color, evidently an old coagulum. The left subclavian artery, just

beyond the origin of its branches, became suddenly smaller than natural, and on examination was discovered to be obliterated for five-eighths of an inch, beyond which it again resumed its normal size and appearance. The occlusion of the vessel seemed to have been the result of inflammation, the coats being thickened and indurated.

DR. PARKER stated in conclusion that the operation for ligature of the subclavian had been performed in all eleven times by the following surgeons:—I. Colles, in 1811, death occurring from hæmorrhage on the fourth day; II. Mott, in 1833, death from hæmorrhage on the eighteenth day; III. Hayden, in 1835, death from hæmorrhage on the twelfth day; IV. O'Reilly, in 1836, death by hæmorrhage on the twenty-third day; V. Partridge, in 1841, death from pericarditis and pleuritis on the fourth day; VI. and VII. Liston, in two cases—in the first, 1837, death occurred from hæmorrhage on the thirteenth day, and in the second, 1839, death from same cause on the thirty-sixth day; VIII. and IX. Auverte, in two cases; in both death was the result of hæmorrhage, in the first on the twenty-second, and in the second on the eleventh day. X. Rodgers, case already referred to; XI. Lastly, Cuvelier, in 1860, death from hæmorrhage on the tenth day—carotid and subclavian of right side ligatured.

DR. BUCK remarked—A case invested with deeper interest than the one before us could scarcely be presented for our consideration. From the post-mortem dissection just described and the specimen exhibited, it appears that, notwithstanding the direct and reverse arterial currents had been intercepted by the ligatures applied to the subclavian, common carotid, and vertebral arteries, the success of the operation was defeated by the circulation still kept up in the aneurismal sac by means of the thyroid axis, internal mammary, and superior intercostal branches. The anastomoses of the terminal branches of the right inferior thyroid with those of the superior of the same side, and also of the internal mammary with the epigastric, must have afforded the channels for restoring and keeping up the circulation in the sac, and thus the formation of coagulum within its cavity has been prevented. Though the ligature upon the subclavian had completely divided the artery, leaving both ends open and exposed, the plug on the proximal side of the ligature had filled up the innominate, and closed it so impermeably as not to permit the passage of water injected at the root of the aorta. On the distal side of this ligature, however, the open mouth of the artery communicated immediately with the sac, and had furnished the repeated hæmorrhages preceding death.

The question here suggests itself—Would the ligation of the thyroid axis, the internal mammary, and superior intercostal, in addition to the vertebral, have arrested all circulation in the aneurismal sac, and thus secured the conditions of success? It appears to me that it would have done so, and it is my firm conviction that this expedient ought to be tried before we concede the impossibility of curing aneurism of the outer division of the subclavian artery by an operation.

DR. MARKOE—I coincide entirely with the views expressed by Dr. Buck. It seems to me that all the experience yet recorded on this subject, goes distinctly to show that the cause of failure in this operation is hæmorrhage from the distal side of the ligatured vessel. No clot has been found in any of the cases published on the distal side of the ligature; and we may safely infer, therefore, that the failure of the operation is due to the absence of this protective clot. The essential pre-requisite to the formation of a clot seems to be such a stoppage of the blood current as will permit coagulation. This, I think, can only be accomplished in the present instance by the tying of all the collateral branches by which recurrent circulation may be established. The only question, in my mind, is, is the proposed plan feasible? I think it is, and should not hesitate, in a similar case, to try it. That the tying of such collateral branches is a very safe procedure, is illustrated by the condition of the ligatured vertebral in this specimen, which

has shrunken down to a small solid cord not half its original size, and was still more fully exemplified in a case in which I recently tied the superior thyroid arteries for goitre. Fearing secondary hæmorrhage, which is not uncommon after these operations, I applied the ligature to all the collateral branches in the neighborhood of the main ligature; two such being tied on one side, and one on the other. No hæmorrhage occurred during the healing of the wounds. So convinced am I that this procedure may supply the wanting element of success, that I should certainly try it in the next case which presents itself to me.

DR. E. KRACKOWIZER thought, that if the blood returning in the aneurismal sac by the anastomotic circulation through the branches of the scaleno-tracheal portion of the subclavian artery was not led off by the axillary artery into the shoulder and the upper extremity, it would coagulate in the sac and prevent secondary hæmorrhage after the falling off of the ligature of the scaleno-tracheal artery.

This result could perhaps be attained, if the distal operation on the supra or infra-clavicular artery preceded the ligation of the scaleno-tracheal artery.

DR. T. MARKOE remarked that such a plan had been taken into consideration, but had been abandoned, because the blood reaching the sac by the collateral branches would not merely flow towards the axilla, but being centripetal in one branch, for example, the thyroid axis might be sent in a centrifugal direction in another one, for blood enters the aneurismal sac from the proximal side even with greater force than before, and, of course, has direct free access to the branches of the main artery, before it expands in the aneurism, yet coagulation under these worst imaginable circumstances does take place; and although rarely so perfectly as to result in a radical cure, yet thereby enough is shown to make it in his eyes worth the attempt, in a similar case, to tie the subclavian artery inside as well as outside the scaleni.

DR. SANDS called the attention of the Society to the appearance presented by the arteria innominata, as illustrating one of the modes by which nature guarded against the occurrence of direct secondary hæmorrhage. Pathologists were not quite agreed as to the precise changes that took place in and around an artery after the application of a ligature. That the ligature caused ulceration of the artery at the point where it was applied; that by exciting the inflammatory process it led to the formation of an internal fibrinous plug, by which the vessel was rendered impervious; that the opposite sides of the artery became adherent to each other in the immediate vicinity of the point ligated; and that the tissues surrounding the artery became consolidated by the deposition of coagulable lymph, were facts which had long been taught and believed. A difference of opinion existed, however, regarding the manner in which secondary hæmorrhage was prevented; some attaching great importance to the formation of an internal coagulum; others relying mainly on the deposit of lymph in the neighboring tissues; whilst there were not wanting those who denied the value or necessity of either of these processes, and maintained that safety depended upon the direct closure of the artery at the point tied by the adhesion of its sides. The appearances in the present specimen afforded positive evidence that the desired security *might* be obtained simply through the intervention of an internal coagulum or plug, sufficiently firm and adherent to resist the force of the column of blood propelled against it. In the present instance, as had been already stated, free supuration had followed the operation; the subclavian and carotid arteries on the cardiac aspect of the ligatures had been destroyed by ulceration as far as the place of bifurcation of the innominate; and the extremity of the latter vessel was found open and gaping, at the bottom of the wound, its cavity being occupied for the greater part of its length by a firm yellowish coagulum, which could be seen by looking into its open extremity. That this coagulum had been efficient during life in obviating hæmorrhage, was shown, not only by the symptoms which indicated recur-

rent hæmorrhage, but also by an experiment performed at the post-mortem examination. The thorax having been opened, the pericardium was divided, and a pipe introduced into the aorta at its origin. A syringe was then applied, and water injected with considerable force into the vessel. Had the innominate artery been pervious, that fact would have been proved at once by the escape of fluid from its open extremity, which, however, remained perfectly dry during the experiment. But, after a quart or more of water had been injected, this fluid was seen to issue freely from the *distal* end of the subclavian artery, into which it had found its way through the anastomotic channels. Dr. Sands did not wish to be understood as asserting that the mode of preventing secondary hæmorrhage here exemplified obtained in every case; he merely desired to record the fact, that the presence of an internal coagulum *may alone* be sufficient to guard against this accident, as it had been in this instance in one of the largest arteries in the body.

The Society then adjourned.

American Medical Times.

SATURDAY, MARCH 5, 1864.

THE SURGEON-GENERAL AND THE PROFESSION.

WE may safely assume that every intelligent and unprejudiced member of our profession takes a lively interest in the Court-Martial of the SURGEON-GENERAL, now in session at the National Capital. He regards this not as the trial of Dr. WILLIAM A. HAMMOND simply, but in a broader view; he sees arraigned before a court of military inquiry the honor and dignity of his profession as represented by the Army Medical Department. Even were this the prosecution of a humble brother on charges involving personal reputation and character, every physician properly alive to the honor of the body to which he belongs, would feel himself implicated in these charges. But this feeling becomes immeasurably intensified when a prominent member of the profession, who stands before the world as its representative, is arraigned on charges involving common honesty and official integrity. There are those, it is true, who disregard alike personal and professional character, and who gratify pique or prejudice by the most unrelenting persecution. They rejoice in seeing the prominent men of their calling humbled; and having no character themselves to lose, they are reckless of the good fame of others, and of the reputation of the profession which their own names degrade. But this class is small and contemptible, and their influence is limited to a narrow circle. The great body of our profession is loyal to its ancient standard of true honor, dignity, and moral excellence, and stands ready at any moment to defend it.

We speak the sentiments, we believe, of the American medical profession, when we pronounce the shameful persecutions of the SURGEON-GENERAL, which have culminated in the present Court-Martial, as a direct insult to itself. The whole proceeding is a palpable effort to degrade the position of the medical staff by bringing into disrepute its acknowledged head. With no shadow of cause, but one of those vague rumors of malfeasance which now cluster so thickly around every department of the public service, the SURGEON-GENERAL was displaced and every effort made to remove him from office. It was only through the

active interposition of those interested in the department that he was allowed to prove that the trivial charges made against him were without foundation. With less resolute friends to aid him, the SURGEON-GENERAL would have been removed without an opportunity. Scarcely another head of a bureau would have been thus indecorously treated. Such treatment the profession should resent as personal to itself.

The trial is progressing to its termination, and we do not doubt that, though there may be many speculations proved to have been practised by subordinates in the Medical Department, yet the SURGEON-GENERAL will stand before the world without a suspicion of participation. If such be the verdict of the Court, the question arises—Will the SURGEON-GENERAL be restored to his rightful position? We begin to hear vague rumors that he is to be relieved, even if the trial results favorably; that the whole proceeding was instituted to accomplish this purpose; and if it fail, he must be retired or summarily relieved. Is the profession prepared to submit to this further humiliation? We trust not. If he is found guilty, let him suffer the penalty of his crime; but if innocent, let him be restored to his full official prerogative.

In this connexion, and in conclusion, we commend to the notice of our readers the following editorial of a leading London contemporary, the *Med. Times and Gazette*:—

"The spectacle of a man, high in our own Profession, who has for two years been intrusted with the care of the bodies of more than half-a-million of men, standing arraigned before a court-martial on a charge of betraying his trust for filthy lucre, is a most melancholy one. The possibility of the charge being true is one that we scarcely like to contemplate. We can only say that, if it should be so, the rope or the bullet afford the only fit means of terminating such a career. But, from the knowledge which we happen to possess of the personal character of Dr. Hammond, against whom these grievous accusations are made, we venture to predict that he will pass the ordeal unharmed. As Surgeon-General of the United States Army, he has had to support a vast weight of responsibility—more, perhaps, than his mental power was equal to; and in a machine of such enormous size and so great complication of parts, it was inevitable that, without, or perhaps even with, a man of first-rate administrative power to direct it, some things must go wrong. And many things undoubtedly have gone wrong: in plain words, there have been rogues in the Medical service of the United States, as in every other department of their public service; but we do not believe Dr. Hammond to have been one of them. His chief fault has been a want of decision, which sometimes prevented him from doing what he knew to be right from fear of the consequences; but, even in the atmosphere of corruption that has prevailed during the war at Washington, his reputation, so far as we know, remained free from taint. On the other hand, the frequent dissensions, and, at last, the absolute antagonism which were known to exist between himself and the Secretary of War, were notoriously of great detriment to the Medical service; but the opinion of the Medical officers in general was decidedly in favour of their own chief, and adverse to the overbearing, discourteous—and, some said, jobbing—Secretary Stanton. From this official, Dr. Hammond certainly did endure some affronts which would have caused many men to resign in disgust: most unfortunately for him his retention of office has resulted in a banishment from Washington of many months' duration, intended to be penal, and an enforced series of wanderings through the different seats of war. What effect the lamentable accident, which we recorded a fortnight ago as having befallen Dr. Hammond during one of these wanderings, will have on the result of the court-martial, we

cannot tell; but it is evident that the inquiry must go on in some form or other; for a man, though a cripple for life, has still a right to his character. We can only hope that there will be some means of punishing the framer of the accusations if they should be proved untrue, as we doubt not they will be. The malignity which could suggest them ought to recoil on the head of the slanderer. We hope to hear a public expression of the opinion of the Profession in America on the question. Dr. Hammond is not an unknown man: he owed his position in a great measure to the influence of the heads of the Sanitary Commission, among whom are some of the first names in our Profession in the country. They must surely have established a claim to be heard in a question of so great importance: the voice of the country, raised at their bidding, must prevent Dr. Hammond, if innocent, from being sacrificed, as others have been, to personal spite."

AN INEBRIATE ASYLUM FOR NEW YORK CITY.

THE Commissioners of Public Charities and Corrections are moving in the matter of establishing an Inebriate Asylum in connexion with the Alms House Department. This is a most important enterprise, and we are glad to see it undertaken by this liberal and energetic Board. They very truly state that it is the duty of our legislative and executive authorities to so constitute its government as to make it powerless for evil and the promoter of good. They believe it may be so organized as to not only save thousands from the evils which fill our prisons and charitable institutions, but, in their stead, turn thousands to habits of industry, sobriety, and integrity. They appeal to the every-day proceedings of our Police Courts; to the sorrowful tales and confessions of every grade of criminals; and to the dark and narrow pathways of the subterranean habitations in this and other cities, where, with awful strides, men, women, and children are passing to the Court of Sessions, and returning to them every ten days from the confinement of the Work-house! They maintain that the evil can be abated; that no effort has been made to change this terrible evil at all commensurate with its extent and importance. The numbers of vagrants are not fairly stated. The statistics which the courts furnish, show conclusively that ten thousand individuals make up the one hundred and thirty-nine thousand and fifty-seven cases appearing in the reports. It is committing and recommitting, discharging and re-discharging the identical prisoner that makes up the formidable array of numbers; it is this constant ebb and flow, between the vile haunts of the town and the islands of the East River, of a distinct class of miseries, that overcrowds our station-houses and courts, necessitating the multiplication of officials for the transaction of this anomalous exchange brokerage in human misery. These unfortunates come and go with unerring regularity, from the Police Office to the Island, from the Island to the rum-shop, from the rum-shop to the station-house, the City Magistrate's Court, and back again, within every two weeks of the year. What chance is there here for reform? what hope of conquering an appetite that compels them to live a besotted life, below the brutes, in the scale of social existence? Under the present infamous order of things, their only hope of escape from the depths of moral degradation to which they have fallen, is in death. At last they fill the pauper's grave, among the unrecognised relics of that vast throng of unhappy beings who have gone the same sad road before. They now ask authority of the Legislature to establish a

system which would mitigate the dreadful misery of these thousands of our fellow-creatures, and help many of them to break away from the bonds of self-indulgence, and become once more good, sober, Christian men and women. They say: Give us an inebriate asylum for those who are now being poisoned, morally and physically, under authority of the law at every turn, and we will show an amelioration of this misery worthy of monumental acknowledgment. Let us, then, have an Inebriate Asylum, but let it be a farm where the free air system may be enforced. We hope the day is not distant when we shall cease to attempt the restoration of diseased minds and morals by confining the unhappy subjects within brick or stone walls.

A CIRCUMLOCUTION OFFICE.

THE habits of vagrants present a subject worthy of the study of a philosopher. How they live, and how they do not live, is a question which no one has as yet attempted to settle. They are persons without any visible means of living, and yet they live to a greater age (according to the vital statistics of the State of Massachusetts) than any other class. Everyone must have occasionally missed a troublesome caller for alms for a considerable period, and then have been surprised to meet again the old familiar face deformed with its usual chronic expression of pain and suffering. It may have excited his curiosity to inquire where this vagrant has a retreat. The records of our Alms-House reveal a curious fact bearing upon this point. In a statement of vagrants and disorderly persons transferred from the city prison to the work-house on Blackwell's Island, during the year 1863, and the number of times they have been previously committed, it appears that there were committed—for the 1st time, 5,775; 2d time, 649; 3d time, 526; 4th time, 443; 5th time, 286; 6th time, 450; 10th time, 632; 15th time, 40; 20th time, 253; 25th time, 68; 30th time, 152; 40th time, 209; 50th time, 148; 60th time, 167; 100th time, 700. Total, 10,753. 2,328 were males, and 8,425 females. Aggregate number of times committed, 139,057, or twelve times for each.

PROSTITUTION IN NEW YORK.

THE "social evil" flourishes in New York as in no other large city of the world. The miserable creatures who ply their trade have not the slightest legal restraint. When so thoroughly diseased as to be compelled to seek medical relief, they apply to the Alms-House, where they remain until relieved, and then return to their old haunts. Every form of venereal disease may be found among these persons, which they propagate far and wide without hindrance. During the year 1862, 5,818 females of this class were admitted to the Island Hospital. The greatest problem presented to our philanthropic citizens is the restraint and proper control of this great evil. As yet, no one in our community has had the courage to attempt to obtain the necessary legislation. But relief must eventually be sought from the Legislature; and we hope the Prison Association, or some similar body, will move in the matter.

GALVANISM is said to be a most effectual mode of arousing the energies of a patient becoming comatose from opium.

SPIRITUALISM has revived under the name of *Psychometry*, and instead of *mediums* we now have what are called *psychometers*; who, by touching an individual, profess to become possessed of his entire history.

Correspondence.

SURGEONS IN COURT-MARTIALS.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—In 1829, Attorney-General Berrien, in reply to an inquiry—"Whether chaplains, surgeons, or pursers, who are regarded on board our ships as non-combatants, are competent to officiate as members of a naval court-martial?" declared that they were not; which decision he rested mainly on the fact, that a tribunal descended from the ancient Court of Chivalry could be composed of none other than military men. The Attorney-General denied at that time that surgeons had rank, either real or assimilated.

I will not discuss the doctrine thus officially announced, except to remind you that it is an attempt to engraft feudalism upon modern civilization.

The following General Order, issued by the Secretary of the Navy not quite three years since, will show that, upon this point, a change of opinion has occurred in that Department:

[COPY.]

GENERAL ORDER.

NAVY DEPARTMENT, }
March 2, 1861.

Whenever any officer of the Corps of surgeons, paymasters, or engineers, is arraigned for trial before a Court of Inquiry or Court-Martial, the Court shall consist in part of officers of the corps to which the accused belongs.

ISAAC TOUCEY,
Secretary of the Navy.

Can the Secretary of War show any good reason why a similar rule should not have been applied to the Army? If it had been done, our present Surgeon-General would have had at least one officer of the Medical Department sitting with the Court which is now investigating the charges which have been preferred against him.

Yours, etc.

FRANK H. HAMILTON, M.D.

NEW YORK.

STATE BOARD OF EXAMINERS.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR,—In the editorial of a late number of your excellent journal, in the article "A State Board of Examiners," there are one or two points on which I would like to make some comment.

The article states:—"The project of a Board of Examiners for the degree of Doctor of Medicine has been revived by the Medical Department of the University of Buffalo. It is proposed that this Board shall examine all candidates for the degree of M.D., and confer diplomas instead of the Medical Colleges * * * Prof. Lee, with whom the scheme originated, has given much attention to this subject, and we hope he will favor the profession with his views."

Now, inasmuch as a committee of the N. Y. State Medical Society, of which I had the honor of being chairman, reported at the meeting in 1861,* and in the report advocated a plan precisely similar, I am prompted to call your attention to the subject, being a little jealous, too, about the right of the committee to the credit of what it deemed a good and practicable plan to be carried out in aid of the advance of medical education.

Dr. Lee, at this last meeting of our Society, before presenting these resolutions of the University of Buffalo, submitted them to me, asking my opinion in regard to them; I told him that I could not do otherwise than approve of them, for certainly in spirit and almost in letter, the resolutions embodied the subject matter of our report, the prin-

ciples of which we should be most happy to see carried out.

By a vote of the State Society, an extra number of copies of the report were ordered to be printed and to be sent to all of the medical societies and medical schools of our country; and also that the report should be transmitted to the American Medical Association, as the expression of the opinion of the New York State Society on the subject. A committee was appointed in reference to the Buffalo resolutions, Dr. Lee being chairman; and as I have been placed upon it, it will be my great pleasure to aid all in my power to carry out the views expressed in the resolution. But a very natural interest in the report of the (original) Committee of Medical Education of our State Society impels me thus to intrude myself upon you.

Yours, &c.,

HOWARD TOWNSEND, M.D.

ALBANY, February 25, 1864.

NEW TEST FOR DIABETIC SUGAR.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—In the January No. of *Braithwaite's Retrospect* for 1864 (page 69), I noticed the following paragraph:—"New Test for Diabetic Sugar.—MM. Trousseau and Dumontpalier have been recently making some experiments with tincture of iodine as a test. This tincture when added to urine, which is acid, imparts a deep color to the fluid, and if the urine in jaundice be treated by some drops of the tincture, the green matter, termed biliverdine, is rendered very manifest. During the trials which produced the above results, some diabetic urine was treated with some drops of the tincture. The urine, almost colorless at first, after the addition, acquired the color of barley-sugar; but this color gradually disappeared, the urine again becoming completely colorless at the end of a few seconds. The experiment was repeated again and again, with the urine of various diabetic patients, and always with the same results, the power of this in producing the discoloration of the tincture being in proportion to its density. Tried with urine from various sources, the conclusion has been arrived at that diabetic urine alone possesses the power of rapidly rendering the tincture colorless. The researches are still being carried on with the hope of being able to measure, by means of the tincture, the exact amount of glucose contained in any given urine."—*Union Médicale*—*London Med. Review*, May, 1863. (p. 610)

Having at that time several specimens of diabetic urine, I determined to give this new test a trial. The urine was first examined with Moore's and Trommer's test, and gave decided evidence of the presence of sugar. The tincture of iodine was then added to a fresh specimen—and the changes of color noticed as above by Trousseau and Dumontpalier took place; other specimens were tried with the same results. I then applied this test to some healthy urine, and, to my surprise, I found the same changes take place in this as did in the diabetic urine. Subsequently about twenty specimens were tested, first with Moore's and Trommer's tests for sugar, and none being found, they were treated with tincture of iodine. The changes of color in these specimens (healthy as regards sugar) were so similar to those produced in diabetic urine that I found it impossible to distinguish one from the other by this test. The discoloration of the tincture was as rapid in the one as in the other, provided the temperature was the same.

I have great hesitation in commenting upon statements made by such authority as Trousseau; but there must be some mistake here—it may be in my interpretation of the test; however, the propriety of this communication will be apparent to anyone who will take the trouble to add a little tincture of iodine to a specimen of diabetic urine, note the result, and then apply the same test to a healthy specimen.

Yours &c.,

S. FLEET SPEIR, M.D.

* See Transactions for 1861, page 193.

Obituary.

DR. CAMMANN.

(Continued from page 105.)

It was in 1838, at the recommendation of Dr. W. Clay Wallace and Dr. Cammann, that the present system of classifying diseases and appointing special physicians to each class was adopted by the trustees of the Northern Dispensary. As this is an interesting fact in the history of the dispensaries of the city, it will not be out of place to give the classification and the names of the physicians appointed during the two first years, or until the system was in successful operation.

1838.

Surgery	R. W. Cairnes, M.D.
Heart and Lungs . .	{ G. P. Cammann, M.D.
	{ J. H. Borrowe, M.D.
Head and Abdomen	{ Alex. Elder, M.D.
	{ W. Steele, M.D.
Eye and Ear	{ W. Clay Wallace, M.D.
	{ W. N. Blakeman, M.D.
Skin	A. N. Gunn, M.D.
Women and Children	Edward Earle, M.D.

The next year the system went into full operation with two physicians to each class.

1839.

Surgery	{ R. W. Cairnes, M.D.
	{ Alonzo Clark, M.D.
Heart and Lungs . .	{ G. P. Cammann, M.D.
	{ J. H. Borrowe, M.D.
Head and Abdomen	{ W. Steele, M.D.
	{ J. H. McVickar, M.D.
Eye and Ear	{ W. C. Wallace, M.D.
	{ W. N. Blakeman, M.D.
Skin	A. N. Gunn, M.D.
	{ J. W. G. Clements, M.D.
	{ Edward Earle, M.D.
Women and Children	{ H. Lott, M.D.

This plan gave great efficiency to the Northern Dispensary, and was in time adopted by all the others.

Dr. Cammann's mind had been occupied with physical diagnosis from the commencement of his professional life; and although he attended diligently to all his duties, yet his constant and favorite study continued to be auscultation and percussion. He was the first to introduce this new method of investigation in New York as a special study; and he did it in his own quiet way among the circle of young physicians in which he moved.

According to Dr. E. B. Warner, who has so long been attached to the Northern Dispensary, Dr. Cammann first conceived the idea of auscultatory percussion while yet a student in Paris. Certain it is that it had early taken root in his mind, and in his professional experience was kept steadily in view; for he was in the habit of measuring hearts by this method while attending to his daily duties, though from his well known modesty he was slow in giving publicity to his views.

Dr. Alonzo Clark says, that, when he returned from Europe in 1838, he found Dr. Cammann busy with the subject of cardiac mensuration, and experimenting with a variety of stethoscopes. Dr. Cammann himself assured me that he had explained his method of measuring solids within cavities to several physicians of eminence, who evidently regarded it as the conceit of a visionary young man; but that Dr. Clark, with ready appreciation, comprehended the whole idea during the first hour of conversation on the subject, and immediately joined him in making experiments and collecting materials,—a labor in which they were also assisted by Dr. C. L. Mitchell, now of Brooklyn. The result of their united efforts was an article in the "New

York Journal of Medicine and Surgery," for July, 1840, entitled, "A New Mode of ascertaining the Dimensions, Form, and Condition of Internal Organs by Percussion." The paper thus appearing under the names of the two eminent co-laborers was from the pen of Dr. Clark,—Dr. Mitchell's services being acknowledged in a foot-note. It was favorably noticed, and copied in whole or in part, by several of the more prominent medical journals and reviews of that period. The "New Mode" was accepted as a valuable discovery and a real advance in medical science; for though Laennec, it is said, was aware of the value of accurate cardiac mensuration in the living subject, he died without discovering any method by which it could be accomplished.

As a means of diagnosis of the condition of organs hidden away in cavities, which, when diseased, may become hypertrophied or atrophied or changed in form, or in determining the size, shape, and connexions of tumors or abnormal growths, this method stands alone; no other approaches it in diagnostic value, either to the physician or surgeon.

If Dr. Cammann had done nothing more than he has done in originating and maturing so valuable a contribution to the healing art, he would still have left a name prominent among medical discoverers.

He next appeared before the public in 1848, in an article which may be found in the "New York Journal of Medicine," entitled, "Experiments to prove that the Capillaries of the Lungs do not anastomose." This, like the former discovery, was the result of *à priori* reasoning; the experiments demonstrating the fact were *post hoc*. The minute anatomy of the lung was by no means clearly established. Malpighi, who was the first to prove that the blood-vessels and air-tubes do not communicate, and also to describe with a degree of accuracy the minute anatomy of the lung as "an almost infinite number of orbicular and sinuous vesicles," declares that "these vesicles communicate with the trachea and with each other." Willis dissented from the views of Malpighi: "These vesicular passages," he says, "have, as it were, little ladders growing thick upon them, and the heap of cells, therefore, bears a resemblance to a bunch of grapes;" which "although they touch each other and seem to cleave together, yet are not connected with one another, but are bounded by their own walls." They also differed in regard to their ideas of capillary anastomosis; but the generally received opinion was, that it was abundant. Soemmering, Reisseisen, Magendie, and Marshall Hall have put forth conflicting theories on the same subject.

Dr. Cammann's article commences by saying: "As it is still a question among anatomists whether the pulmonary capillaries do or do not anastomose, the following experiments may not be without their value." These experiments unquestionably prove that there is no anastomosis between the capillaries of the different lobules or even lobulettes. The *rete mirabile* of each portion of the true respiratory system has connexion with its own terminal artery, and with no other. Before making the experiments, Dr. Cammann reasoned thus: "If it be true, as some anatomists teach, that the anastomosis of the arteries is greater in the lung than in other parts of the body, why does not every case of hæmoptysis prove certainly fatal? Again: what prevents the occurrence of exhausting hæmorrhage where there are abscesses or excavations in the lungs, surrounded by perfectly healthy structure, without even the intervention of false membrane? How can lobular pneumonia, or gangrene of the lung, be explained under that theory?" At the close of the article he says: "We have thus demonstrated how, by being composed of an aggregate of isolated portions, the lungs are protected from the extension of disease; and how, but for this safeguard of nature, organs so essential to existence would be more liable to permanent injury where a portion of their tissue is incapable of performing its functions."

(To be Continued.)

FRANKLIN EVERTS, M.D.

DR. EVERTS was a native of Mexico, Oswego Co., N.Y. He studied medicine in his native county, and graduated at the University Medical College, New York. Soon after his graduation, he entered Bellevue Hospital, where he remained the usual term. On leaving the hospital he located in practice in the City of Oswego, N.Y., where he rapidly rose to the highest position in the profession, and acquired a large and lucrative practice. Symptoms of phthisis pulmonalis, strongly hereditary in his family, early began to be developed, and finally led him to abandon Oswego. On the breaking out of the war, he became surgeon of a company of artillery, which joined the army of the Potomac. He entered upon the Peninsular campaign, and at the battle of Fair Oaks was actively employed with his command. He was soon after attacked with the Chickahominy fever, and had to return North. After recovering from the fever Dr. EVERTS found his old disease, which had made but slow progress, apparently revived, and he deliberated upon the propriety of seeking a warmer latitude. At this time, the spring of 1862, a place was offered him in the U.S. Gen. Hospital, Central Park, then under the charge of Dr. J. W. S. GOULEY, U.S.A., which he accepted. He remained in this hospital, discharging the duties of his position, until the early fall, when his health had failed so much that he resigned with the intention of seeking a winter residence in Minnesota. He returned to Oswego, where he remained among his friends until his death, Feb. 12, at the age of thirty-six years.

DR. EVERTS has left a large circle of warm and devoted friends, to whom the tidings of his untimely death will come with peculiar sadness. He had a genial, sensitive nature, a quick, appreciative mind, and a nobility of character which commanded the sympathy and esteem of every one with whom he was brought into personal relations. His fine social qualities, and his thorough medical education, eminently adapted him for success as a general practitioner.

Army Medical Intelligence.

WAR DEPARTMENT, ADJUTANT-GENERAL'S OFFICE, }
WASHINGTON, D.C., February 12, 1864. }

GENERAL ORDERS No. 55.—Upon the death of a Commissioned Officer, in a general hospital, the Surgeon in charge, besides forwarding to the Adjutant General the required inventory of his effects, will immediately inform the nearest relative of the officer what effects were left by him. If at the expiration of two months the articles are not called for by a person authorized to receive them, they will be sold at auction, and the proceeds sent to the Treasury, as prescribed by Regulations for the effects of enlisted men. Swords, watches, trinkets, and articles of that class will not be disposed of in this manner, but will be properly labelled with the name, rank, and regiment, and date of death of the owner, and sent to the Adjutant General's Office, to be deposited with the Second Auditor of the Treasury to await the application of the heirs.

By order of the Secretary of War:

E. D. TOWNSEND,
Assistant Adjutant-General.

ORDERS, CHANGES, &c.

Surgeon William Grinstead, U.S.V., in addition to his duties as Recorder of the Army Medical Board now in session at Cincinnati, Ohio, for the examination of Assistant-Surgeons of Volunteers, will relieve Surgeon F. M. Heister, U.S.V., as a member of the Board, also in session in the same city, for the organization of the Invalid Corps. On being relieved Surgeon Heister will proceed without delay to Louisville, Ky., and report in person to Assistant Surgeon-General Wood, U.S.A., for assignment to duty.

Surgeon Francis Greene, U.S.V., is relieved from duty in the Department of the South, and will proceed without delay to Louisville, Ky., and report in person to Assistant Surgeon-General Wood, U.S.A., for assignment to duty.

Asst.-Surgeon H. S. Taft, 105th Ohio Vols., and Asst.-Surgeon Jonathan

E. Davis, 27th Michigan Cavalry (published officially January 18, 1864), having failed to appear before the Military Commission instituted by Special Orders No. 53, series of 1863, from the War Department, within the prescribed time, the President directs that they be dismissed the service of the United States, to date January 18, 1864, for absence without proper authority.

Assistant-Surgeon A. L. Williams, 74th Ohio Vols. (published officially January 26, 1864), having failed to appear before the Military Commission instituted by Special Orders No. 53, series of 1863, from the War Department, within the prescribed time, is by direction of the President dismissed the service of the United States, for absence without proper authority.

Assistant-Surgeon Harvey E. Brown, U.S.A., is relieved from duty at Fort Columbus, New York harbor, and will report in person without delay for duty to the commanding General, Department of New Mexico.

Surgeon William R. De Witt, U.S.V., is relieved from duty at Washington, D. C., and will report in person without delay to the commanding General, Army of the Potomac, for duty.

The journey from Washington, D. C., to Louisville, Ky., and back in order to turn over his property at the latter place, made by Surgeon A. H. Hoff, U.S.V., is authorized; he having reported in this city in obedience to a summons from a Judge-Advocate of a General Court-Martial as a witness, and his station having been meantime changed from Louisville, Ky., to the Department of the East.

Assistant Surgeon Rector Pierson, now serving in the 115th New York Vols., is transferred to the 127th New York Vols., his original regiment, and is mustered into that regiment, to date July 19, 1863, the day he reported for duty.

Surgeon L. H. Holden, U.S.A., is relieved from duty in the Department of the Monongahela, and will proceed without delay to Chicago, Ill., and relieve Surgeon J. B. Porter, U.S.A. (retired), in his duties at that place.

Permission to visit Washington, D.C., is granted Surgeon W. D. Stewart, U.S.V.

Surgeon E. B. Dalton, U.S.V., is relieved from duty in the Department of Virginia and North Carolina, and will report to the commanding General, Army of the Potomac, for assignment to duty.

Surgeon Jacob R. Ludlow, U.S.V., is relieved from duty in the Department of the Gulf, and will report at the expiration of his leave of absence to Assistant Surgeon-General R. C. Wood, U.S.A., at Louisville, Ky., for assignment to duty.

So much of Special Orders No. 47, January 30, 1864, from the War Department, as confirmed the order from the Surgeon-General's Office, granting Surgeon Josiah Curtis, U.S.V., permission to visit Washington, D. C., is revoked.

The leave of absence granted Surgeon G. M. Sternberg, U.S.A., in Special Orders No. 17, January 16, 1864, from Headquarters, Department of the Gulf, is extended twenty days.

1st Lieutenant John S. Tutto, is relieved from duty with Company K, 1st Regiment Invalid Corps, at Washington, D. C., and will report for duty without delay to Surgeon J. B. Porter, Medical Director, U.S.A., for duty with the 16th Company, 2d Battalion, Invalid Corps.

The order of Brigadier-General Slemmer, U.S.V., President of the Examining Board at Cincinnati, Ohio, dated February 4, 1864, directing Surgeon F. H. Gross, U.S.V., to join his command without delay, and paragraph 37, Special Orders No. 64, from the War Department, confirming the above, is revoked. Surgeon Gross will comply with the requirements of Special Orders No. 62, February 8, 1864, directing him to report to the commanding General, Middle Department, for duty at Camp Parole, Annapolis, Md.

Assistant-Surgeon H. L. W. Burritt, U.S.V., has been assigned to duty in charge of General Hospital No. 5, Knoxville, Tenn.

Surgeon Jabez Perkins, U.S.V., has returned to Chattanooga, Tenn., from leave of absence, and is waiting orders.

Surgeon Edward Shippen, U.S.V., is stationed at Knoxville, Tenn., as Medical Director of the Post.

Medical News.

THE SAN FRANCISCO MEDICAL PRESS has changed editors, and will hereafter be conducted by Drs. R. B. Cole and H. Gibbons. The former editor, Dr. L. C. Lane, is Surgeon or the Board of Enrolment for the Southern District of California.

BELLEVUE HOSPITAL MEDICAL COLLEGE.—The annual catalogue of this institution is published, from which we learn that the class of the present session numbers 307 students. The number of graduates for last year was forty-one.

DR. F. HINKLE, Assist.-Surg., U.S.A., is preparing a report to the Surgeon-General on the permanganate of potassa and its uses. His employment of this remedy has been very extensive, embracing a large number of cases of different affections.

DEATH FROM CHLOROFORM.—Mr. John B. Sissons, of Syracuse, died suddenly last week from the effects of chloroform. He had been bathing his limbs with the fluid, and had retired to his room. Soon after, his wife entered and found him lying up on the floor, dead. A handkerchief saturated with chloroform and an open bottle were found by his side. A post-mortem examination revealed the fact that his lungs were very much congested from the effects of the inhalation of the chloroform.

Original Lectures.

LECTURES ON GUNSHOT INJURIES OF THE CHEST.

By FRANK H. HAMILTON, M.D.,

PROF. OF MILITARY SURGERY AND FRACTURES AT BELLEVUE HOSP. MED. COLLEGE, AND LONG ISLAND COLLEGE HOSPITAL; SURGEON TO BELLEVUE HOSPITAL; LATE MEDICAL INSPECTOR, U.S.A.

LECTURE III.—PART II.

PERFORATING wounds which do not prove immediately fatal from the hæmorrhage—and it is upon these alone that our statistics of results are based—are still to be regarded as exceedingly dangerous. They are, however, much less dangerous than perforating wounds of the head or of the abdomen, and less so than those wounds of the chest in which the missile remains within its cavity.

It has been often observed that penetrating and perforating wounds of the chest and abdomen occasion, in a large proportion of cases, excessive nervous prostration or faintness, sometimes accompanied with nausea; in other words, that the patients suffer a "shock," although no large blood-vessels or important nerves may have been torn. Whatever may be the explanation in other examples, we are pretty well persuaded that in perforating and penetrating wounds of the lungs, unattended with hæmorrhage or nervous lesions, and when the admission of air has not caused the collapse of a considerable portion of the lungs, the apparent shock is generally due to the moral effect of the injury; since we have found it in repeated instances entirely absent in such cases, while it is quite as often present in examples of non-penetrating wounds, but in which the patient has supposed the ball to have entered.

When a rib is broken at the point of entrance, the fragments may be driven in and made to penetrate deeply into the structure of the lungs; and the fact of the existence of a fracture at this point may, therefore, be regarded as adding much to the gravity of the prognosis; while a fracture at the point of exit is a complication of comparatively little moment.

An examination ought always to be made with the finger or probe to determine whether a rib is broken; and at the point of entrance a reasonable effort should be made to remove such loose fragments as may happen to be within reach. One of the most frequent causes of death and of delay in recovery is found to be small spiculæ of bone loosened or completely detached from a rib. This examination ought to have as its further object, the removal of any other foreign substance which may have chanced to lodge near the external orifice. Under almost no circumstances is it proper to introduce the probe or finger beyond the pleural cavity or into the substance of the lung itself. In most cases the collapse of the lung will effectually prevent such a procedure; but even when, owing to adhesions or other causes, collapse of the lung does not occur, an exploration of the track through the substance of the lung itself could only provoke hæmorrhage, and in many other ways add to the ultimate dangers.

The main trunk of each arterial intercostal artery lies, through a great portion of its course, in a small groove situated on the inner surface of the rib, and just above its lower margin, entering this groove near the angle of the rib posteriorly, and abandoning it not far from the sternum. If, therefore, the rib be broken completely off and driven inwards, or if only its lower margin is broken, a rupture of this artery may be the consequence. It is quite probable that this accident occurs often, but being torn asunder rather than cut, it is very rarely that it gives rise to troublesome hæmorrhage. On the 2d of May, 1862, I saw at the General Hospital, at Fortress Monroe, under the care of Surgeon Cuyler, U.S.A., an example of rupture of this artery followed by severe and repeated bleedings. A large

shot had lacerated the integuments pretty extensively on the left side of the thorax, exposing and fracturing two or three ribs. The surgeon had removed a portion of the rib beneath which the hæmorrhage had taken place, and tied the vessel; but the constant motion of the fragments during inspiration and expiration seemed to have worn through the coats of the artery again, and at the time I visited the hospital the bleeding was recurring at intervals; the wound looked badly, and the patient was so low as to afford very little hope of a final recovery.

In case the vessel can be found and separated from the adjacent tissues, it should be tied; if this cannot be done, continued pressure from within, made by the finger, the employment of a small pledget of lint saturated with the persulphate of iron and held against the artery in the same manner, may sometimes succeed, or the vessel may be twisted possibly, or secured by casting a ligature around the entire rib. If none of these measures are applicable or effective, the method pursued by Surgeon Cuyler, namely, excising a portion of the rib, and then tying the artery, would offer the best chance of success.

If the ball has perforated the sternum through its central portions, near the median line, an abscess in the anterior mediastinal space is almost inevitable; and it is worthy of consideration whether the trephine, by enlarging the external opening, and enabling the surgeon to remove some of the small spiculæ from within, might not diminish the subsequent dangers.

The symptoms which indicate that a ball has traversed a portion of the lungs, are, embarrassed respiration, sometimes a sensation of impending suffocation, expectoration of blood, the escape of air from the wound, or the extravasation of air underneath the integuments.

When several or all of these signs are present, and especially when there is added the fact of complete perforation of the opposite walls of the thorax, no opportunity is left for a doubt; but if, as sometimes happens, only one or two of these signs are present, the diagnosis may be rendered difficult. The respiration may be embarrassed in consequence of alarm, or of a severe concussion; a pulmonary blood-vessel may have been ruptured by a blow upon the walls of the thorax, and this is more especially liable to happen when a rib has been broken, although the ball has not penetrated; emphysema may be the result of a fracture and projection of a spicula of bone into the pulmonary tissue.

The expectoration of blood in most cases occurs immediately—frequently not until after the lapse of several hours, or even days, but it is rarely seen after the fifth, sixth, or tenth day.

Isaac Etchell, a private in the 72d Pa., was wounded at Antietam, on the 17th of Sept., 1862, by a round ball, which entered the left side of the chest in front, three inches above and to the left of the nipple, passing completely through. He expectorated blood immediately and freely, but it soon ceased, and never recurred. On the 24th day the wounds had closed, and he was sitting up, but he continued to suffer from pain and a sense of oppression over the whole of his left side. Having never seen him since, I am unable to state the final result.

Daniel Ryan, private, of the 70th N. Y. Vols., was wounded July 2d, 1863, at Gettysburg, by a rifle ball which passed through the left lower lobe of the lungs. This man expectorated blood freely at the moment of the receipt of the injury, and he continued to expectorate a little occasionally during the five following days, but not any since. Six months later, when I saw him at the General Hospital in Newark, under the care of Surgeon Taylor, U.S.A., a slight cough remained, but the wound had nearly healed.

Norton E. Hubbard, of the 6th Wis. Vols., was wounded at Antietam, Sept. 17th, 1862, by a rifle ball, which entered the chest in front on the left side, directly under the clavicle, and to the sternal side of the coraco-clavicular ligaments, passing through the chest, and escaping near the

posterior angle of the scapula. It was found lying directly under the skin at this point, and was cut out by his surgeon. He expectorated blood at first very freely; but when I saw him on the 23d day, he informed me that he had had no bleeding since the first day. Some small fragments of bone, probably from the clavicle, have escaped in front. The wound was discharging copiously; he had a troublesome cough; his appetite was poor, and his chance for recovery seemed poor.

Moses Hazeltine, a private in the 12th Mass. (this regiment was commanded by Col. Webster, the son of Daniel Webster), was wounded at Antietam by a ball, which entered the thorax two inches outside of the left nipple, and passed entirely through the body. He expectorated blood within ten minutes, and continued to do so for nine or ten days. Air has escaped through the wound in the back. Suppuration was free on the 23d day; he had considerable cough, and was looking thin and pale.

At Boonsborough, Md., I was requested to see Lieut. —, of the 27th Ind. Vols., who had been wounded twenty-four days before by a round ball, which perforated the chest and the upper lobe of the right lung. He expectorated blood at first, but not after a few days. The wound was suppurating, and his general condition not very promising.

At Middletown, Md., my attention was directed to Daniel Bowers, private, 19th Ind. Vols., who had been wounded at South Mountain, twenty-six days before. A round ball had entered on the left side, two inches outside of the nipple, escaping near the centre of the back, on the same side. He expectorated blood slightly soon after he was wounded. No grave symptoms ensued, and the wound was nearly closed. He said he was well.

In the small treatise on Military Surgery which I published at the commencement of the present war, I related several examples of remarkable recoveries after perforating gunshot wounds of the chest; among which will be found full particulars of the case of General Shields, one of the most extraordinary examples upon record. At the battle of Cerro Gordo, Mexico, on the 18th of April, 1847, General Shields was wounded by a canister shot, which penetrated between the fourth and fifth ribs of the right side, an inch and a half or two inches from the sternum, and emerged between the sixth and seventh ribs of the same side, about one inch from their junction with the vertebræ. Surgeon Wright, of the U.S.A., who was in attendance, in order to arrest the flow of blood, applied a compress of lint, and subsequently sought to sustain him by stimulants, etc. Without entering more fully into the details of the treatment and the progress of the case, it is sufficient for my present purpose to state that he rejoined his command a few weeks after in its march towards the Mexican capital, during which he was engaged in several battles, in one of which he received a severe wound from an escopet ball in his arm. His recovery from the chest wound was complete; and he has ever since enjoyed perfect health. General Shields has commanded a Division during the present war, and in the brilliant affair at Winchester, Va., more than a year since, he was again wounded severely in one of his arms.

NEW REMEDY FOR BOILS, ETC.—Dr. Hoffman states in the *San Francisco Medical Press*, that the tincture of iodine, double strength, of the formula given in the United States Dispensary, applied thoroughly to boils, bunions, and ear-bunches, will cut short the suppurative stages more than one-half, as well as relieve the patient of all pain. All of the feverish symptoms, with alternate agues, chills, and unpleasant feelings in the same, that are met with in delicate females and other persons, are relieved almost entirely by the first application. The quantity of matter is also much smaller when this remedy is used than under other treatment.

Original Communications.

CASE OF SYNCHRONOUS AMPUTATION OF THE LEFT THIGH AT ITS UPPER THIRD, AND OF THE LEFT ARM.

WITH SOME REMARKS ON AMPUTATIONS OF THE THIGH, PERFORMED AT MORRIS ISLAND, S. C., AND ON THE LIGATION OF VEINS.

By S. W. GROSS, A.M., M.D.

SURGEON U.S.V., CHIEF MEDICAL OFFICER NORTHERN DISTRICT, DEPARTMENT OF THE SOUTH.

JAMES D. WEEKS, aged 20 years, private, Co. G, 3d Reg. U.S. Col. Troops, was admitted into the Field Hospital, Morris Island, S. C., of which I was in charge, at noon, Nov. 14, 1863. He had been wounded by the explosion of a shell, thrown from Fort Johnson into Fort Putnam, and I saw him an hour after the receipt of his injuries. The left thigh-bone, at its middle, was extensively comminuted, the fragments being driven into the adjacent muscles, and the soft parts were terribly mutilated. The left elbow-joint and lower extremity of the humerus were much shattered, and there was also a lacerated wound of the integument of the left side.

Weeks had lost a large quantity of blood, and the thigh wound was still bleeding. The pulse was very weak, the surface cold, and the system much exhausted. In fact, he was more dead than alive. I very much doubted the propriety of operative interference, and had no idea that he would ultimately recover. Under the use of stimulants, however, he rallied, and chloroform having been cautiously administered, with the effect of rendering the pulse more full and strong, I first removed the arm at its middle, by antero-posterior flaps, ligating five vessels. The thigh was then removed by oblique flaps, on account of the nature of the wound, at the lower part of the upper third. But two ligatures were required, one including the artery, the other the *femoral vein*, which remained open and continued to bleed after the ordinary means had failed, and the patient could ill afford to lose more blood. The flaps of both stumps were at once brought together by sutures and adhesive strips, and a little morphia was given. The circulation in both limbs was controlled by the finger. During the day milk-punch was freely administered, and he passed a quiet night. Nov. 16.—Weeks has an excellent appetite, sleeps well, suffers little pain, and takes an abundance of beef-tea, milk-punch, and oranges. His bowels having been confined for several days before the receipt of the injuries, I ordered him a dose of castor-oil. 19th.—The patient has been doing extremely well; the stumps are discharging healthy pus. During the evening he complained of a good deal of pain, which was allayed by morphia.—22d.—The ligature of the brachial artery dropped off this morning, and there is union of nearly the entire surface of the stump. The thigh stump gapes on its outer aspect, and the wound is covered with a plastic lymph. I ordered warm-water dressing to be applied, and twenty-five drops of the tincture of the chloride of iron every eight hours.—24.—The third ligature came away from the arm-stump. Under the warm-water dressing the thigh-stump is improving; the plastic lymph has disappeared, and the granulations look healthy. On the following day, the two remaining ligatures of the arm dropped off. On the 30th, the ligature of the femoral vein was removed, and that of the artery on the 3d of December.

From the second day after the operations, Weeks had an excellent appetite. He was always bright and cheerful, enjoyed his pipe, and partook freely of milk punch, nutritious soups, oysters, and oranges. At the present time, Feb. 1, 1864, the thigh-stump is entirely well, but there is necrosis of the end of the humerus, and the bone is not yet sufficiently loose to be removed.

Remarks.—The above case presents several points, and in connexion with it I have made some observations of interest, which are worthy of comment:—1st. *The subject of the case was a negro.* In the Department of the South there are a number of regiments of Colored troops, and it is a well ascertained fact that they are more liable to disease, and that the mortality is greater than among the white regiments. They rarely ever recover from a severe wound, and when attacked by disease they seem to care but little for life, and die in spite of all remedies and attention. These facts are particularly true of the North Carolina and South Carolina colored soldiers, the sick reports of which are fifty per cent. larger than those of the white troops; and I find, on referring to my notes, that there were, during the months of November and December, thirty-eight deaths from disease in thirteen regiments, three of which were colored. The latter lost seventeen men of the thirty-eight. The colored troops recruited in the Northern States do not suffer to the same degree, and the subject of the above case came from Camden, New Jersey.

2d. *Recovery from the severe injuries, and particularly after amputation of the upper third of the thigh.*—Of six thigh amputations which I performed in the Field Hospital at Morris Island, this is the only one of the upper third. Five were primary and one was secondary. Four were of the lower third, three primary, and one secondary; one was of the upper third, and one of the middle third, both of the latter being primary. The secondary amputation was for acute mortification, following a shell wound of the leg, and death ensued. One primary case of the lower third died, the patient having never rallied from the operation and the shock. We have thus five primary amputations of the different thirds of the thigh, with but one death, the mortality being 20 per cent. These results are extremely satisfactory, and add more conclusive evidence as to the advantage of primary over secondary amputation. The excellent results in these cases are due to the operations being performed almost immediately after the receipt of the injuries, to the men being kept quiet and not sent to General Hospitals until all danger has ceased, and to the mild climate. Thus in November, the monthly mean of the temperature was 60.03°; the daily mean of the warmest day being 71.66°; of the coldest day 35.66°. In December the monthly mean was 49.96°, the daily mean of the warmest day being 62.66°, of the coldest day 38.66°. To these facts I shall have occasion to allude in a future article.

3d. *Ligation of veins.*—In three cases of primary amputation of the thigh, I have been obliged to resort to this procedure, although I had been always prejudiced against it, having been taught to avoid it on account of the danger of phlebitis. In these cases, all of which recovered, the orifice of the vein remained patulous, emitting so much blood that I was fearful as to the result. In all, the application of cold-water, ice, torsion, and pressure of the flaps against each other failed to arrest the hæmorrhage, and I was compelled to employ the ligature. The operation not having been followed by any untoward consequences, I have become fully convinced that there is no danger in resorting to it, when the general health of the subject is good. Veins are ligated every day in cases of varix, and yet we rarely ever hear of suppurative inflammation following. In the inferior animals these vessels can be tied with impunity, and I see no reason why it cannot be done in the human subject when there is a necessity for it. In confirmation of my views, I may here refer to the report of a case in the *Edinburgh Medical Journal*, in January 7, 1863, of amputation at the hip-joint by Mr. James Spence, in which he was compelled to ligate the femoral vein, and the woman made a rapid recovery.

FOLLY ISLAND, S. C., Feb. 1, 1864.

DR. HOMER O. HITCHCOCK, of Kalamazoo, Mich., is preparing a paper on the Entrance of Air into the Uterine Veins in forced Abortion, to be read at the meeting of the American Medical Association.

REMARKABLE CASE OF FRACTURE OF THE PELVIC BONES.

By IRVING W. LYON, M.D.,

SENIOR ASSISTANT SURGEON BELLEVUE HOSPITAL.

THOMAS DALY, æt. 38, admitted January 17th, 1864, in a state of partial collapse. He said that he fell from the front platform of a horse-car at two o'clock this morning, and he thought the wheels of the car passed over the left arm and the body in the pelvic region. The pulse at the wrist was scarcely perceptible, the countenance pale and clammy, and he complained of very severe pain about the pelvis and in the left arm, which was crushed at about the junction of the middle with the lower third. He said that he had felt the pelvic bones "move upon each other," producing a "grating sensation," and that he "was all apart." On account of his condition a thorough examination was wholly inadmissible; there were no external marks of injury discoverable about the pelvis; when the iliac bones were gently pressed towards each other, he cried out with pain. The left leg and thigh were next carefully manipulated, and crepitus was distinctly felt at the upper part of the thigh; but as soon as the limb was replaced upon the bed he raised the heel about one foot, which was accepted as evidence of the non-existence of a fracture through the neck of the femur, and the crepitus was believed to indicate a fracture of the pelvis. He suffered at short intervals from paroxysms of intense pain in the chest, back, and pelvis, which alternated with a feeling of comparative ease; the urine, which had not been voided since the accident (fifteen hours), was drawn off, measured about six ounces, and bloody. Patient vomited occasionally. He was ordered diffusible stimulants, opiates, and external warmth.

Jan. 18th.—Patient much more comfortable. Pulse 80, and of good strength; but he continues to vomit whenever anything is taken into the stomach. The urine is taken away by the catheter, and found to be clear, and in quantity about ten ounces. He can get neither sleep nor nourishment. Paroxysms of pain still continue, especially if he move. Jan. 19th.—Still better; can pass his water without assistance, and does not vomit so much. Some beef-tea is tolerated by the stomach. Jan. 20th.—Much the same as yesterday, except that he has vomited but a very few times; pain the same; and his position, which is dorsal, has not been changed since admission. Jan. 21st.—Arm begins to slough; pulse 84; urination natural; vomiting has ceased entirely; bowels are very loose, and he cannot control them. This is the first time that his bowels have moved since the accident. He takes more food, very little of stimulants and opiates, as he has an impression that they disagree with him. Jan. 22d.—Complains of increased pain in the pelvic, and especially in the inguinal region; has not slept any. Pulse 110; urine voided without difficulty; he takes beef tea, wine, and beer, and says that he can yet feel crepitus in the pelvis. His look is haggard and cadaveric; diarrhoea much diminished.

Jan. 23d.—The abdomen is very tympanitic, so that respiration is much impeded; vomits everything; pulse 120; tongue furred; no movement of the bowels; no pain anywhere, except when moved.

Jan. 24th.—No pain in any part of the body; pulse 120; the abdomen is distended to its utmost, and is of uniform consistence; bowels moved at eleven A.M.; urine drawn by catheter; he vomits everything taken into the stomach; all of the mental faculties perfectly retained.

Jan. 25th.—Died this morning at eleven o'clock from asthenia—just eight days and nine hours after the accident.

Assisted by Dr. Brownell, I made an autopsy twenty-two hours after death. The only external mark of injury, aside from the mangled arm, was a slight ecchymosis just above the trochanter major, upon the left side. The intestines were very much distended with flatus; the peritoneal cavity was perfectly free from gas or fluid. The peritoneum lining the pelvic cavity, together with the lumbar and lower part of the abdominal regions, was very dark from sul-

peritoneal ecchymosis. There was no evidence of peritonitis. The kidneys and spleen were very much congested. The bladder was intact; the pelvis was fractured as follows:—the body of the os pubis, on the right side, was irregularly fractured, with some comminution from the edge of the acetabulum, obliquely inwards and backwards. The descending ramus was fractured transversely to its axis, near its junction with the ramus of the ischium. The os pubis on the left side was fractured through its body, transversely to its axis, and with comminuted edges at about four lines from the lip of the acetabulum; its ramus was not fractured, but the ramus of the ischium on the left side was broken, just below its union with the ramus of the pubes. Neither of the iliac bones was fractured.

The sacrum was abnormal and fractured in three places: two vertical, and one transverse; the abnormality consisted in the consolidation of six vertebral pieces instead of five; there was also a corresponding increase of the sacral foramina, being five instead of four upon each side; the sacrum was also elongated, measuring five and a half inches upon its anterior surface. The sacrum was fractured transversely through the middle of the third vertebral piece, between the second and third foramina; and the lower fragment was inclined considerably forwards. The sacrum was fractured vertically upon the right side, beginning at about the middle of the posterior border of the "broad triangular surface," on either side of the articulation, between the sacrum and last lumbar vertebra, running obliquely forwards and inwards into the sacral foramina and terminating below in the transverse fracture above described; so that this fracture was through the first and second foramina downwards, until arrested by the transverse. The sacrum was also fractured vertically upon the left side, from about the same point, and in the same direction as upon the opposite, but instead of stopping at the transverse fracture, descended through the third, and into the fourth foramina, so that this fracture was through the first, second, third, and fourth sacral foramina; the sacro-iliac synchondrosis was uninjured, and the same is the case with both femora.

Commentary.—This, with but one exception, is by far the most severe case of fractured pelvis which I am able to find recorded; and it is truly remarkable that so extensive a crushing and comminution of those bones should occur without rupture of the bladder, as this viscus rarely escapes injury when the pelvic bones are broken to any considerable extent. The case is also interesting from the length of time which the patient survived the accident, for it would seem, *a priori*, that violence, sufficient to produce such an injury, would occasion a collapse, from which the patient would be unable to rally. The manner in which the bones were fractured, especially the sacrum, is worthy of note, the vertical fractures being through the sacral foramina, which is generally the case, instead of a separation of the sacro-iliac synchondrosis. The driver said that the car contained over sixty passengers, and that he felt it jolt, as though it had passed over a stone, or stick of wood; but it is difficult to believe that the wheels passed over the pelvis, without leaving any mark upon the skin, as the sharp flange of the wheel above, and the iron rail below, could not have failed to produce either a frightful contusion or laceration of the soft parts. It is altogether probable that the pelvis sustained its injuries by rolling beneath the steps of the platform, or the projecting portions of the truck of the car.

The case above excepted is of great interest in connexion with this, because of the many points of analogy between the two. It occurred in the practice of Prof. E. R. Peaslee, and was published by this gentleman in the April number of the *American Journal of Med. Science* for 1850. In this case the bladder was ruptured through its neck, and had an external communication through a lacerated wound of the perineum. The patient lived forty-one days after the injury. The pelvis was fractured as follows:

"1st. An oblique fracture of the right ramus ischii, ex-

tending horizontally across it to the lower margin of the thyroid foramen. No attempt at reunion.

"2d. An oblique fracture of the right os pubis, in a vertical plane from the ilio-pectineal eminence backwards and inwards to a point behind the spine of the pubes; the fractured extremities are entirely denuded for more than an inch in both directions.

"3d. A comminuted fracture of the left os pubis, directly backwards, in a vertical plane, from a point just inside of the ilio-pectineal eminence; a slight attempt at reunion is apparent on its anterior aspect.

"4th. A fracture of left ramus ischii, precisely like that on the right side, but with very little displacement. Some attempt at reparation.

"5th. Another fracture above and parallel to the last of the left ramus pubis; no displacement. Partial reunion, of course, on the five fractures extended into the two thyroid foramina.

"6th. A fracture of the sacrum on the right side was also discovered, parallel to, and just three-quarters of an inch from the sacro-iliac articulation, and extending the whole length of the sacrum along the outer margins of the sacral foramina; the fractured part was also itself divided into two equal parts by another transverse fracture—the 7th found in this subject. No attempt at reunion. The cancellated tissue of the right ilium is of a livid color; that of the left is normal. The sacro-iliac articulations and the symphysis pubis are uninjured."

From a comparison of these two cases, one is struck with the similarity which holds between their respective fractures—the chief difference being in the fracture of the sacrum. In Dr. Peaslee's case but one edge of this bone was broken off, and this fragment again broken in its middle; while in the case of Daly, both edges were separated, and the intermediate piece fractured transversely through its middle, while the left lateral fragment was also fractured transversely, in a line with the transverse fracture of the sacrum. Dr. Peaslee's case lived forty-one days after the accident, with rupture of the bladder, but the urine was discharged freely through the external opening, and infiltration of the tissues thereby prevented. The Dr. says: "Independently of the treatment employed, I attribute the prolongation of life, in this case, to the incessant care bestowed upon the patient by his attendants."

The prognosis of fractured pelvis depends mainly upon two things: first, whether the fracture be produced or accompanied by much violence; and second, whether the pelvic viscera, and more especially the bladder, be ruptured or not. In an elaborate summary of seventy-eight cases of rupture of the bladder, published by Prof. STEPHEN SMITH, in the *New York Journal of Medicine* for 1851, I find eleven were complicated with fracture of the pelvis, but one of which recovered; and in this case the operation for lithotomy was performed, and the exit of the urine insured in this way. The patient had a rapid convalescence.

In Prof. F. H. Hamilton's celebrated Treatise on Fractures and Dislocations, while but one case of fractured pelvis with ruptured bladder is mentioned, which proved fatal, there are twenty cases of fracture of the pelvic bones without ruptured bladder which recovered, and seven which died, and one case (Sir Astley Cooper's) of fracture of the ramus of the ischium, with rupture of the urethra, and these accompanied with fracture of the thigh, in which the patient recovered.

In Malgaigne's Treatise on Fractures, there are seven cases of recovery after fracture of the pelvis, uncomplicated with rupture of the bladder, and five deaths—one death with fracture of the pelvis and rupture of the bladder, and two recoveries. These facts recapitulated, give sixty-five cases of fracture of the pelvis, of which forty-nine were without, and sixteen with rupture of the bladder, including Sir Astley's case of ruptured urethra. Of these forty-nine cases, thirty-seven recovered, and twelve died; and of the sixteen with ruptured bladder, twelve died and four recovered.

BELLEVUE HOSPITAL, Feb. 10, 1864.

Progress of Medical Science.

AMERICAN JOURNAL OF MEDICAL SCIENCES.

ART. I.—Dr. Warren, of Boston, relates an interesting case of hypertrophic elongation of the cervix uteri, successfully removed by incision. The patient was fifty-six years of age, and the tumor of twenty-six years' standing. It was from three to four inches long; projected between the labia, bringing with it about half of the bladder, and a considerable portion of the peritoneal cul-de-sac, which parts were carefully dissected away from the enlarged cervix, and the operation completed by removing the enlarged portion and securing the vessels, after which the portion of the uterus which remained, together with the adjacent organs, resumed its natural position in the pelvis.

ART. II.—Dr. Philip S. Wales, U.S.N., gives an account of spotted fever, as it occurred at Newport, R. I., in 1863, with some history of the disease, symptoms, diagnosis, and treatment. Of the seven cases reported, four proved fatal. The treatment consisted in the early employment of stimulants, tonics, nourishment, external heat, sinapisms, blisters, etc. Often large doses of opium and camphor are indicated, and their employment attended with a beneficial result.

ART. III.—On the presence of air in the veins as a cause of death, by JAMES SUMNER GREENE, M.D., of Dorchester, Mass. The author reviews the literature of the subject, giving a brief resumé of the cases recorded, with such inferences as the facts known will warrant. "During the progress of an operation, when all seems going on well, a peculiar sound is heard at the bottom of the wound, oftenest described as gurgling, hissing, or bubbling. There is frequently a slight issue of venous blood, indicating that a vein is wounded, and often bubbles of air are noticed at the point from whence the sound proceeds. * * * The patient suddenly turns pale, utters a cry such as 'I am faint,' 'I am dying,' and becomes insensible; or there may be observed anxiety of countenance, labored respiration, lividity of the lips, dilated pupils, and convulsions." Little is said concerning the treatment, the indications of which are, to prevent ingress of air, as immediate pressure upon the vein between the wound and heart, or by torsion, ligature, etc.; to remove, if possible, from the heart and lungs, that already admitted, as by artificial respiration, pressure upon the chest, etc.; to sustain the vital organs in the performance of their functions, by artificial respiration with the administration of brandy, and diffusible stimulants.

ART. IV.—Dr. James J. Levick, of Philadelphia, gives an account of the epidemic influenza of 1861 and of 1863, with notices of some malignant forms of this disease, showing, from a careful review of its history, that "in all ages its periodical visitations have preceded, accompanied, or succeeded epidemic diseases of the most malignant and pestilential character."

ART. V.—The surgical treatment of Amenorrhœa. By HORATIO R. STORER, M.D., of Boston. Read before the Norfolk District Medical Society of Massachusetts. He dwells on the importance of a differential diagnosis, particularly of the non-existence of pregnancy. Where local stimulation or dilatation is necessary, the instruments in favor are, the intra-uterine stem pessary, the stem formed of copper and zinc, for the purpose of producing an additional therapeutic effect by galvanic action; a graduated series of metallic bougies, or expandible tents, preferring those self-lubricating from their own mucilage to sponge—slippery-elm bark he has found serviceable. As a general rule he does not favor lateral incision, and wholly rejects, as impracticable, Tyler Smith's proposal of tubal catheterization. Where there is complete occlusion, he advises a free incision, and the uterus to be emptied as rapidly and thoroughly as possible, even to the extent of completely

rinsing its cavity by gentle injections of lukewarm water or soap-suds, otherwise the violent uterine contractions coming on after the flow has once commenced (the outlet being still impeded), may force backward a portion of the retained fluid, through the Fallopian tubes, into the cavity of the abdomen, giving rise to fatal peritonitis.

ART. VI.—On the Constitution and Source of the Bile. By Thomas Antisell, Surgeon U.S.V., etc.

ART. VII.—On the Therapeutic Application of the Solution of the Permanganate of Potash, and of Ozone. By Samuel Jackson, M.D. A solution, in proportion of two parts to 1000 of water, he has found useful in dyspepsia and other infirmities of a cachectic nature; also both internally and as a local application to foul ulcers. The dose, a teaspoonful of the solution in a little water, four times a-day. Upon inquiry for its active principles, he found by testing the solution, that there are present the salt, ozone, and the peroxide of hydrogen. The last two bodies, by their active chemical properties, arrest the disorganizing process in gangrenous wounds, and rouse into activity the organic or vital actions of the surrounding tissues, renovate the fluids, and establish the healing process. Taken internally, it enters the blood, and excites its molecular or chemical action—an indispensable condition of life.

ART. VIII.—Prof. S. D. Gross reports an interesting case of amputation at the hip-joint of a little girl, nine years of age.

ART. IX.—Dr. John A. Lidell, U.S.V., reports a case of gunshot wound, in which the axillary artery of the left side was divided, and the brachial plexus of nerves injured. Aneurism occurred on the 21st day, and the subclavian was ligated external to the scalenus. Secondary hæmorrhage was controlled by injecting into the sac through a female catheter the liquor ferri persulph. The patient died from exhaustion, forty-six days after the operation.

ART. X.—Case of Aneurism of the Axillary Artery. By Isaac Norris, Jr., M.D., Act. Asst.-Surgeon, U.S.A. This was the result of a gunshot wound. The aneurism broke, and the patient became much reduced by loss of blood, but his life was prolonged for a number of hours by keeping up digital compression upon the artery, which was finally tied. The patient died six hours after the operation.

ART. XI.—On the use of fresh lard as a simple dressing for recent burns, by John Packard, M.D., of Philadelphia.

ART. XII.—Bibron's Bromine Mixture, an antidote to the poison of the Boa Crotaloides. By Chas. Hughes, M.D., Surg. 1st Inf. M. S. M. Vols. The case reported is that of a private, bitten on the little finger by a specimen of the reptile known as copperhead. A tight ligature was applied, and whiskey administered to intoxication, in which condition he was taken to the hospital, where the ligature was loosened; the finger incised as for a whitlow, and immersed for twenty-four hours in warm water. To this was added an emollient anodyne poultice on the third day, and continued through the fourth; after which simple cerate dressings were daily applied until he was returned to duty. The constitutional treatment consisted exclusively of Bibron's antidote, which was commenced soon after the ligature was removed, and repeated on the first day every three or four hours; on the second, ter die, and on the third p. r. n. Its composition, as furnished to the army, is:—R. Brominii 3 ijs; potass. iodidi, gr. ii; hyd. chl. corrosiv., gr. i; alcohol dilut. f. 3 xxx. Misce. Dose:—A fluid-drachm diluted with a tablespoonful of wine or brandy, and repeat it, if necessary.

ART. XIII.—Cases. By Isaac G. Porter, M.D., U.S.A., at Fort Trumbull, Ct. Chronic pleurisy from gunshot wound, in which the operation of paracentesis was performed; also, a case of anomalous choreic convulsions.

ART. XIV.—Surgical Cases. By John Ashhurst, Jr., M.D., one of the surgeons of the Episcopal Hospital. These are mostly injuries from accidents, etc.

ART. XV.—Prof. C. D. Meigs, of Philadelphia, published a letter on the treatment of Diphtheria. He regards nitrate of silver (if properly used) as the most reliable remedy.

It should be applied early, and of a strength that will not cause pain (two or three grs. to the ounce), and not oftener than once a day. Use a gargle made by mixing half a teaspoonful of cayenne pepper, a teaspoonful of salt, a wine-glassful of vinegar, and half a pint of boiling water. Use often. Apply a cloth wrung out of ice-water to the throat. If asphyxiation has begun, give hot brandy and water, or hot whiskey punch—plenty of it.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, NOV. 11, 1863.

DR. D. S. CONANT, PRESIDENT, IN THE CHAIR.

CENTRAL NECROSIS OF CERVIX FEMORIS.

DR. VOSS presented a specimen of hip-joint disease, and gave the following history:—It was removed from a child five years of age, who showed the first symptoms of disease in the left hip only three months before death. There was nothing peculiarly interesting in the symptoms of the affection, and the patient was treated simply by rest and fresh air, the parents living at the time in the country. The symptoms disappeared after the child had lain constantly in the open air during the day for a period of two months. At the end of that time it was seized with an attack of tubercular meningitis, which terminated fatally in the course of three weeks.

At the autopsy the hip-joint was opened, and no exudation was found in its cavity, but the capsule was very highly injected; the same was the case with the ligamentum patellæ and cartilage of incrustation. An interesting state of things, however, was found to exist in connexion with the neck of the femur; on its lower aspect, about two lines from the brim of the cartilage covering the head of the bone, there was an opening into the cancellous structure, which contained a small piece of dead bone.

INTERESTING CONGENITAL MALFORMATION OF THE PELVIS.

DR. VOSS also presented a second specimen, consisting of the pelvic part of one femur, and the whole of the other, together with the lumbar vertebræ removed from a man forty years of age, who had suffered from congenital dislocation of both hips. Dr. V. stated that he regretted, on account of the peculiar circumstances attending the possession of the specimen, he had not sufficient time to prepare it as he wished. He was able, however, to show some interesting points.

Contrary to the generally received opinion, all the muscles passing from the pelvis to the femur were large and well developed. The patient would walk with a peculiar gait, by keeping the upper part of his body backwards, his pelvis forward, and shifting the weight from one side to the other. There was a marked curvature of the lumbar vertebræ forward, with a corresponding prominence of the buttocks backwards. The distance between the two tubera ischii was fully seven inches. The pubic bones were more flattened than is commonly found to be the case even in the female, and the height of the synchondrosis of the pubes was much increased. The bones of the femur were flattened from one side to the other, doubtless from the muscles lying in contact with them. In consequence of the femur having its articulation above its usual point, the courses of the ilio-femoral muscles were singularly changed; for instance, the psoas magnus and iliacus internus took the direction downwards, backwards, and upwards; and in consequence of this, also, a cartilaginous growth had formed in the tendon of those muscles. The pectineus and other muscles in the neighborhood were also changed in their relations. There was no ligamentum teres, and the distance from the trochanter to the head of the femur was about two inches,

the cervix of the bone being an insignificant concern. The articulating surface of the thigh-bone was flattened, presenting a more or less corrugated appearance. The acetabulum was filled with fatty appendices. There was no inversion of the feet. Dr. Voss had no acquaintance with the patient during life.

The following are the principal measurements of this pelvis, as compared with those of the normal male pelvis, after Krause:—

		Normal.
Greatest width of the upper aperture of the pelvis,	9 in. 2 lin.	(9-6)
Distance of spine, ant sup.	9 inches	(9-)
Conjugata	3-8	(4-)
Diameter transverse	4-8	(4-9)
Diamet. obliquus (diagonal)	4-5	(4-6)
From apex of os coccygis to lower margin of symphysis pubis	2-7	(2-9)
Distance of the Tubera ischii	5-9	(8)
Height of os sacrum (from promontory to apex of os coccyx)	3-8	(5-3)
Height of synchondrosis ossium pubis	1-5	(2-)

DR. BAUER presented an acephalous fœtus with spina bifida of the cervical region. The crystalline lenses were both in a state of cataract. The fœtus lived but two minutes after birth.

DR. CONANT did not understand why the fœtus should have breathed at all without any respiratory tract.

DR. ELLIOT remarked that in every case of acephalous fœtus that he had seen, the breech presented.

DR. POST referred to a case where the face presented.

POSTERIOR CURVATURE OF THE SPINE OF SIX YEARS' STANDING; PARAPLEGIA; RELIEF OF THE LATTER, AND ARREST OF SPINAL CARIES; EVENTUAL DEATH FROM GRANULAR MENINGITIS.

DR. BAUER exhibited to the Society a specimen of a spine which he thought of singular pathological interest. The history of the case whence it had been derived, presented the following features:—When at the tender age of about three years the patient met with a fall. Soon after the accident the little girl exhibited some indefinite suffering. One of our leading surgeons pronounced it very correctly *incipient Potts' Disease*, and held out but little hope of recovery. The case was therefore transferred to the charge of another and less distinguished practitioner, who affirmed the diagnosis, and directed generous regimen, cod-liver oil, and an issue near the spine. Locomotion was rather encouraged by him than otherwise.

For five months this treatment was scrupulously adhered to without benefit. During the ensuing ten months the patient received no treatment at all. Meanwhile the condition of the patient became much aggravated, both locally and constitutionally, and when at last motor paralysis of the lower extremities was superadded to the sufferings of the patient, Dr. Bauer was requested to attend upon her. At that juncture the patient was attenuated, prostrate, and almost hydræmic, her respiration laborious, and the cardiac action greatly excited. She complained of pain in the stomach, augmented by the slightest disturbance of her repose. There was a great tenderness about the deformed portion of the spine, but no trace of suppuration. The angular curvature occupied the thoraco-lumbar portion, the spinous process of the first lumbar vertebra being the most prominent point. The paraplegia comprised only the motor nerves, and was free from contractions of muscles; but so perfect was the motor paralysis that excitation produced no response. The ilio-inguinal regions and the pelvic cavity were found unencumbered by consecutive abscess.

Diagnosis.—The early appearance of the curvature after the accident, its seat at the thoraco-lumbar section of the spine, its angular shape, and the nature of the cause, left scarcely any doubt that a fracture of either the body of the twelfth thoracic or that of the first lumbar vertebra had been sustained.

If this supposition was correct, the prognosis could be but unfavorable. For all symptoms indicated alterations in structure and form of the displaced vertebra; caries of the

same was impending, if it had not already set in; consecutive abscess had to be dreaded whilst the constitutional strength was below par. All this irrespective of the existing complication of paraplegia.

Notwithstanding the unfavorable circumstances of the case, something had to be done in order to palliate the agony of the patient.

Since the spine was not in a physical condition to sustain the superstructure of the body, Dr. Bauer directed the recumbent posture upon a water-bed. Repeated leechings were instituted to relieve the hyperæmia of the affected parts. Besides some local lubrications of an appropriate kind, the patient was left without medicine, liberal diet being considered the best restorative and tonic.

A mere temporary amelioration of the trouble would seem to have been a satisfactory result of the treatment. But the improvement following was so prompt, rapid, substantial, and persistent, that the doctor became a sceptic of his diagnosis, and felt inclined to believe that the pathological mischief might be less serious than supposed. Thus encouraged in hope, and at a time when all tenderness of the spine and the paraplegia had disappeared, when the patient had greatly improved her exterior and weight, Dr. Bauer considered himself justified in relaxing the stringency of the position. The patient was therefore allowed to creep about on knees and elbows.

At the fourth month of the treatment, an accurate mould of the patient's body was obtained, and a cast accordingly made in plaster of Paris. In exhibiting the same, Dr. Bauer afforded an opportunity to the members of the society to realize the extent and gravity of the distortion.

Upon this last a wire apparatus of the doctor's own construction was fitted like a shell to the back. Thus protected and secured, the patient, in a draw-wagon on her back, was allowed passive exercises in the open air. With the eighth month a spinal supporter was applied, and henceforth active locomotion permitted. During the ensuing four years the patient enjoyed comparative good health, and the presumption seemed to be justified, that consolidation of the spine had unexpectedly been effected.

Last spring, the first time after her discharge, Dr. Bauer was again sent for. The patient suffered then from cerebral meningitis, eventually terminating fatally. There were no symptoms implicating the spinal cord, its membranes, or the spine itself.

Twenty-four hours after death the autopsy was made. The general appearance of the body good; state of its nutrition satisfactory, considering that the patient had partaken of but little food during her late illness. Arachnitis, with widely scattered granular eminences, made up connective tissue. The disease centred upon the brain, and extended into the spinal canal, though marked hyperæmia of spinal membranes. Tubercular deposits nowhere to be found.

Dr. BAUER then gave the following description of the specimen. It is longitudinally divided into two halves, and comprises the six lower and four upper lumbar vertebrae, the first being but in a fragmentary state. The spinal cord is preserved with the left half; the angular infraction of the spine at the first lumbar vertebra or its remnant, and the spinous process of the latter the most prominent point of the curvature. The cord is free from disease and mechanical compression. The spinal canal slightly narrowed at the infraction, leaving room enough, however, for the safe keeping of the cord. Anteriorly and laterally, the lower portion of the specimen is surrounded by dense and thickened connective tissue, endowing the infraction of the spine with a certain degree of firmness and immobility. All the intervertebral fibro-cartilages but one, completely normal; the latter, being placed between the last thoracic and the first lumbar vertebra, has nearly disappeared. When in a recent state, the vertebral bodies rather hyperæmic, but without osteoporosis; the twelfth thoracic rather more densified by apparent plastic infiltration. The thoracic portion of specimen perfectly straight, but inclining forward; the lumbar

portion bending strongly backward—the junction of both in an almost right angle with the lower surface of the twelfth thoracic vertebral body, upon the anterior one of the first vertebral body. The former deficient in front, as if a wedge-shaped piece was wanting; the latter, reduced by caries to a mere fragment, still connected, however, with the adjacent parts. From this fragment a small sequestrum is so completely isolated as to be easily removed and replaced. In front of the fragment a space is left, being filled with a homogeneous cheese-like overrunning material of yellowish-grey color. With one or two exceptions, each vertebral body of the specimen presents a cavity close to the spinal canal, and perfected by the dura mater itself. These cavities are of different dimensions, the largest not exceeding a small bean or pea, and occupied by the same material, which may even be traced between the dura mater and the vertebral bodies from one cavity to the other, connecting them, as it were, with each other.

At a glance, the said material appeared to be tubercular matter, and as such it was pronounced by a gentleman equally proficient in pathological anatomy and the use of the microscope. So much he was persuaded of the correctness of his views, that he deemed it absurd to put it to a microscopic test.

Dr. Bauer, after having resorted to the microscope, arrived, however, at a widely different conclusion. And in order to place his diagnosis of the questionable material beyond possible dispute, he solicited the assistance of Prof. Alonzo Clark, who, after a careful and most thorough microscopic inspection, agreed with Dr. Bauer that the material consisted of pus in a state of condensation and fatty degeneration; in fact, that the purulent matter had undergone for some time those changes that characterize the advancing process of repair.

This question being settled in behalf of bona fide pus, to the exclusion of tubercular matter, the morbid changes in the specimen are more readily commented on than might appear from their complications.

The source of the suppuration was evidently centred in the body of the first lumbar vertebra. The matter produced by caries, *per se*, is not copious, and mostly of a mild character, unless exposed to the action of atmospheric air, being precluded in the present case. At the time when the suppuration of the bony structure was at its height, when local irritation was kept up by active locomotion, when the quantity of pus was largest, it sought and found an outlet into the spinal canal, wherein it diffused upwards and downwards between the dura mater and the bodies of the vertebra. From this circumstance varied effects were derived.

1. The matter pushed the dura mater towards the cord, and caused its compression. Hence the paraplegia.

2. The matter was brought in contact with the posterior surfaces of the vertebral bodies, soaked or macerated them, and thus gave rise to the multilocular abscess of the vertebrae. For this interpretation the very form and location of the various abscesses could be taken in proof. All the abscesses present flat excavations communicating with the spinal canal, completed, as it were, by a covering of the dura mater; and the matter seems to be continuous from one abscess to the other. If the abscesses had originated independently and spontaneously, they would occupy a more central location, and not at the posterior periphery of the vertebral bodies. The correspondence of seat cannot be received as accidental; it must have a common cause, which Dr. Bauer presumed to be in the diffusion of matter from one point. Another proof for this version might be inferred from the fact that the contents of all abscesses were of the same character and condition. Whether the diagnosis of fracture was correct could scarcely be determined on at this juncture. Yet it must be admitted that the clinical observation of the attending symptoms was directly in favor of the same; whereas the pathological changes did not reveal one single fact against that supposition. That the disease was chiefly local could not be gainsaid; that it had resulted from

a local injury was proved; that the location was apt to fracture of the spine more than any other, the experiments of Bonnet and Pommier had demonstrated; that fractures of that portion of the skeleton were much more frequent than usually admitted, had likewise been shown by Gurlt. The presumption of fracture was still more strengthened by the shape of the twelfth thoracic vertebra, whose defect was exactly of that description which a fracture would occasion. The greater defect of the first lumbar vertebra was no objection to such a view, for it should be remembered that a diagonal fracture of the body of the twelfth thoracic vertebra would leave the fragment still corrected with the lower fibro-cartilage, and respectively with the body of the first lumbar vertebra. If converted into a foreign body by being prevented to adapt itself, it would obviously direct its irritating effects upon those structures with which it is organically still connected; and then the matter would likely prefer a downward course.

It seems singular, continued Dr. Bauer, that necrosis and caries should have existed for so long a time without external manifestation; moreover, should have come to a stand-still and fairly entered upon the process of repair. The like facts do not often present themselves in the common range of surgical observation, and are therefore of more than ordinary interest. Not unlikely, the local irritation, perpetuated by locomotion, was set at rest by the recumbent posture, for the first improvements were initiated by the change of position.

In conclusion, Dr. Bauer called attention to a similar specimen exhibited to the Society on a prior occasion; in this, the caries of the spine had originated in disintegration and softening of the fibro-cartilages, constituting, therefore, a very different causation. In his opinion, it was a grave error to attribute to one cause (tuberculosis) all posterior deformities, as Delpech and his followers had done, to the detriment of their patients.

American Medical Times.

SATURDAY, MARCH 12, 1864.

REFORM IN HOSPITAL APPOINTMENTS.

THERE can be no doubt that a new era in Medical Education has begun in this country. The marked success of schools connected with hospitals proves too unmistakably that theoretical instruction is about to be supplanted by the demonstrative. It is vain to oppose the progressive change in the public mind. It is based on the self-evident truth that medicine, a science of experiment and observation, can be cultivated successfully only at the bed-side—a truth which all the logic of casuistry can never unsettle. That truth underlies every branch of scientific industry, but finds in practical medicine its highest development and brightest illustration. Science and art, theory and practice, are one and indivisible. Science teaches the mind, and art instructs the hand; the former gives the sound, discriminating judgment, and the latter the cunning skill in execution. Both are alike essential to success, and both are to be acquired together. We advise the student of anatomy to dissect with his chart before him; and why should we not advise the student of practice to study his book at the bed-side? The simple truth is, we have far too long taught medicine by an artificial plan. The profession has not been governed by the same good sense that men exercise in the ordinary duties of life. But we do not design to discuss the merits of the different systems of medical teaching;

our purpose was to call attention to the organization of hospitals, when regarded as the great centres of medical education.

Civil hospitals have hitherto been only the receptacles of the sick. In their organization the comfort of the inmates has been the especial care of their guardians, and but secondary attention has been given to the character of the medical attendance. Hospitals have been regarded by the profession as practical schools, where the physicians and surgeons might attain by experience and observation to great excellence. The great majority of the distinguished men of the profession have held positions in hospitals, and in these large fields for study and accurate investigation have acquired that skill which has given them success in practice. Nearly all of the familiar names which adorn the pages of medical history represent so many different hospitals.

But a higher and nobler service is about to be rendered by civil hospitals. They are not only to be the resort of the sick, and schools for the training of a few physicians and surgeons, but they are to become the great fountains of medical knowledge. Within the hospital ward the student of medicine will hereafter begin and complete his education. The school and hospital will no longer be separate institutions, but they must be the same in location, the same in name, and the same in organization.

In this view it becomes a matter of no small importance, that the medical staff of civil hospitals be selected with great care. Hitherto the governing Boards have exercised but little discretion in the choice of candidates for vacancies. In general, that person has been chosen who has brought the largest pressure of a political, social, or pecuniary kind to bear upon the appointing power. Merit is almost universally elbowed out of the way by arrogant conceit; and places of power and influence are filled by those whom the genius of medicine would discard. For this reason, our hospitals have been, for the most part, poorly provided with medical attendance. The physicians selected are rarely the growing and advancing members of the profession. They are too often those third-rate men, who, in practical life, necessarily take an inferior rank. They are not familiar with the late discoveries in medicine, nor do they reflect its present condition; errors in diagnosis and treatment are the daily clinical lessons which they teach. The surgeons are equally unqualified for their responsible positions. They are not only frequently men of no science, but they are as frequently deficient in ordinary skill. We must go to our hospitals to witness poor surgery. Here may be seen the most palpable errors in practice, openly and shamelessly committed. We shrink from the mention of the terrible lessons which incompetent surgeons impress upon those who attend much upon hospital practice. If the study of mal-practice is useful to the student, then do those half-educated physicians and surgeons, who may be found in every hospital, serve a beneficial purpose; their lessons are certainly most impressive, if not instructive.

The evil of which we complain can and must be remedied. First: no more incompetent persons should be appointed to vacancies; they should be excluded by the system of concours. In no other way can this defect in our hospital organizations be completely remedied. So long as a Board of laymen may choose a physician or surgeon from among candidates, no reliance can be placed upon their choice. They may by mistake select a pro-

per person, but the present staff of most civil hospitals proves that the contrary would be the result. If, however, the claims of rival candidates were rigidly scrutinized, and if he were compelled to prove by severe tests his fitness for these public responsible positions, the evil would at once be corrected.

But there would still be in all civil hospitals a class of medical attendants who become incompetent through age. For it is not true that medical men, more than others, as they cross the threshold that separates the active and useful period of life from senility, yield to the requirements of age. Too often, instead of recognising the fact that they are no longer competent to fulfil the duties of their position, they become more than ever confident of their ability, and scorn the suggestion of imbecility as a premeditated insult. But whatever may have been their early fame, they are truly no longer qualified for the duties which they now undertake to perform. Their theories and their practice are of the past. If our civil hospitals are to take high positions as schools of learning, a rule must be adopted in each, requiring members of the staff to resign at some given age. In France that age is fixed at sixty. Whether that is the period at which medical men cease to learn or not, we are not prepared to decide, but we may affirm that it is the period at which they generally cease to be useful as teachers. Their teaching is henceforth only the stale repetition of former well conned lessons, without the variation often of a single new idea. From hospitals and schools this class of incompetents should therefore be rigidly excluded, by a statute of limitation. The changes in hospital organization which we have noted are demanded by the progress of the age in the practical study of every profession. The theory of instruction is to bring the student face to face with fact. But to fulfil this mission, hospitals must be served by competent teachers. False teachers, like false prophets, only lead astray, and should be displaced from their responsible trusts.

SANITARY COMMISSIONS IN EUROPE.

THE recent movement of a large European army has divulged the fact that, with all the preparation to which standing military organizations are subjected, there is need of supplementary aid from the people to supply the soldier with all the necessities of his condition. When the standing army of Prussia recently took the field against Denmark, so great was the need of suitable clothing and supplies, that the Royal Commissioner did not hesitate to call upon the people for aid. He says: "Our columns are now moving towards Lubeck, to be ready to enter Holstein. In consequence of excessive cold weather, the men suffer terribly for want of warm clothing. Many of the soldiers have no woollen socks, and only a little straw or a few rags with which to fill their shoes, and are in great danger of having their toes frost-bitten. Very few of them have shirts of any kind, or nearly enough under-clothing to protect them from the cold. I propose collecting articles of this kind, and money to purchase, and have made others as fast as possible, to be forwarded to the army. I therefore appeal to all who are friends of our soldiers." An association at Halle inquired of the Minister of War if their aid was required, to which he replied: "It is true that it is the duty of this department to give our troops clothing suited for winter; but it is equally true that, owing to the suddenness with which we have been

obliged to move our army, it will be difficult to give the men a full supply of proper clothing, unless we receive the patriotic help of all good citizens. For these reasons, I shall be very grateful to your association for a full and prompt supply of woollen socks, gloves, under-shirts and drawers, and for articles for hospital use; and those who have money to give, can direct it in no way better than through your society." There is a class of persons who persistently allege that there is no need of the efforts which we are making to supply our soldiers with suitable clothing, etc., and who denounce the Sanitary Commission's labors as superfluous. But we are learning the fact that modern warfare has few precedents, and they are useless. Governments can do, after all, but a limited service in the care of its soldiers. The speed with which armies move, the vast numbers wounded at every engagement, the terrible destruction of material, etc., has no parallel in the past, and no single organization can fully meet the demand made upon it. The Sanitary Commission of this country, being the bureau of the people's supplies to the army, is evidently about to be imitated abroad. In this, as in many other respects, we are to establish new and most important precedents.

INCREASE OF MEDICAL STUDENTS.

THE close of the session of the Medical Colleges reveals the fact that there has been a large increase of students in attendance upon all the Medical Colleges of the country. The schools of New York and Philadelphia have again reached nearly the maximum of their former attendance; and all the schools of the East and West report larger classes than formerly. There is also, we think, a higher grade of young men coming forward to engage in the study of medicine. They represent the higher classes of society, and bring to the profession not only better intellects, but much more thorough preliminary education. The great inducement which the Army and Navy hold out to qualified medical men is the cause of this stimulus and attraction to the medical profession. With this increase of medical students the obligations of the schools to give sound and thorough instruction are greatly enhanced. There is now no obstacle to the elevation of the character of the medical profession on the part of those who seek to enter it. The whole responsibility rests with the educational bodies.

Obituary.

DR. CAMMANN.

(Continued from page 165.)

DURING all this time Dr. Cammann had been laboriously employed in clinical study and in teaching at the class of chest-diseases of the Northern Dispensary. He carefully noted each morbid sign, and during his leisure moments reasoned upon its significance and value in diagnosis. His own disease, preventing him from sleeping in the latter part of the night, directed his attention powerfully to all the signs of cardiac affections. The silent hours were spent in profitable meditation on the derangements, organic and functional, of that monitor within his own breast, which constantly warned him that his days and nights of labor might at any moment be brought to a sudden close.

The public, but more especially his intimate professional friends, appreciated the value of his opinions, and he was frequently called in consultation in difficult and obscure

cases. Dr. F. U. Johnston is said to have remarked of him: "There is one man whose retiring modesty prevents him from being known as well as he should be in this community, but who is really head and shoulders above us all in his specialty, and is, besides, one of our best practitioners." Dr. Johnston's well known standing in the profession, with his reputation for discriminating judgment and clear common sense, gives weight to this opinion; and I venture to say that a majority of those who knew Dr. Cammann will entirely coincide with Dr. Johnston's appreciation of him.

It was at the Northern Dispensary that the double stethoscope bearing his name was perfected. In 1852, Dr. H. W. Brown having shown one of Marsh's patent double stethoscopes to Dr. Cammann, the latter observed that the principle was not new, for he had one in his possession sent to him from Europe, which had one sound-collecting cup and two ear-cups, and was intended for two persons to hear the same sound at the same time;* that he believed a really valuable instrument could be formed involving the binaural principle; and as Marsh had patented his imperfect one, thereby debarring many from its use, it would be a public benefit to perfect an instrument and give it freely to the profession. With the assistance of Drs. H. W. Brown and C. P. Tucker, after some time and at considerable expense, he succeeded in perfecting an instrument, which, by common consent, is considered the best yet devised for the purpose intended. Notwithstanding Dr. Cammann never placed his name upon the instrument (that was done by the maker), nor called it Cammann's Stethoscope, he has received more mention abroad in connexion with the double self-adjusting stethoscope than from his real discoveries. He, in fact, considered the subject of comparatively slight importance, having pursued it chiefly as a pastime. The instrument is nevertheless a good one, and deserves some notice. It is intended to convey to the mind through both ears the same sound-impression, directing the whole attention to the one sensation, and producing the same effect on the mind by sound that the stereoscope does by light. The result is a clearer and more distinct idea of the subject than is gained by a single impression. In cases of difficult diagnosis the instrument is invaluable; but as it would injure the eye to be always looking through the stereoscope, so also the ear loses its delicacy by the too frequent use of the double stethoscope. Dr. Cammann soon became aware of the effect of its constant use, and laid it aside for occasional cases only.

In 1852, Dr. Cammann removed from Laight to Fourteenth street. For several years he had been in the habit of spending his summers at his country-seat at Fordham, and of coming to town every morning to attend his professional duties. The Demilt Dispensary was just organized, and he received the appointment to the class of chest-diseases. This gave him dispensary duty six days of the week; and the labor proving too severe a tax upon his strength, he grew ill. With great reluctance he gave up his class at the Northern Dispensary, with which he had been connected for twenty-eight years, and was immediately elected consulting physician.

In 1859, he gave up his residence in the city and removed permanently to Fordham, still coming in every morning to attend to his duties, and returning in the evening. His mother was still living in Brooklyn, and his filial devotion would not permit him to be far from her. On this account he had for many years confined himself to the vicinity of New York, and it was his habit to make her regular and frequent visits. At length, on the 15th of April, 1862, death released her from the infirmities of age. This

event had a sensible effect upon him; it removed one of the objects of his watchful attention, and loosened one of the ties that bound him to earth. Still, he relaxed none of his energy in the performance of his duties, and was as prompt at his office and at the Dispensary as ever. Yet a sadness weighed upon him which was noticed by his family. Mrs. Cammann inquired the cause, and, at her earnest solicitation, he admitted that he was not well. On the evening following this confession, upon returning from town, he handed her two papers, saying, "Here you have my whole heart." Extracts from these papers were read before the Academy of Medicine with the account of his last illness and post-mortem examination. They were evidently intended for private consolation, but they do so much honor to his head as well as his heart, that I have obtained permission to present them.

The first paper is dated June, 1861, and is as follows:—

"I have had for many years the conviction that my heart was damaged, from repeated oppression and palpitation under excitement. This view of my condition has been confirmed from the gradual increase of these symptoms; and now the frequent pain and constriction at the heart almost equal in severity *angina pectoris*. As additional and positive evidence, I have for one and a half years distinctly heard, when in a recumbent position, an intense, prolonged diastolic murmur of high pitch, and for the last six months a slight systolic; since a few months the diastolic has so increased in loudness, that I even hear it when standing, being of a buzzing character, and both annoying and ominous.

"There exists, then, a regurgitation through the aortic valves, from ossific deposits. As the murmur is very prolonged, the deficiency is, as yet, slight. By careful regulation as to exercise, excitement, and sleep, I have thus far prevented functional derangement. My only refreshing repose is in the evening, reclining in the arm-chair, as I am wakeful and oppressed when on the bed.

"Having disciplined my mind to expect sudden death, I look forward to the event without anxiety, as being preferable to prolonged existence with all the suffering of exhausting disease. The continued feeling of discomfort will explain my occasional irritability and quiet sadness. It is far better to be a silent sufferer than to mar the happiness of one's family by exciting their sympathy. I shall labor diligently to soothe the anguish of the unfortunate, as long as fortitude and determination of purpose defy the inroads of disease. 'He saved others; himself he cannot save.' In the spirit-world we will be taught why the mass of mankind restrict their aspirations to the satisfying of their appetites and passions,—the mystery of low ambition. We possess an inner life, reserved for the few kindred spirits who can understand and appreciate us, when the immortal mind communes with its congenial fellow,—the only true and satisfactory enjoyment in life.

"There also exists an outer life, devoted to the welfare of humanity. This will develop noble faculties, but is not in unison with our spiritual being. We are created for better purposes than to grovel here below. It requires firm resolution to perform our daily duties. After the excitement of the day has passed, we retire to our home, sick at heart, weary in spirit, and incapacitated to fulfil our domestic obligations. Our mission on earth accomplished, we fall asleep and rest from our labors, with the inward joy of being at peace with ourselves, with the consciousness of rectitude of intention. I would not on any consideration endure the mental torture of having led an aimless life,—no, not even if annihilation were our certain doom. Life—Death—Life again. Whither do we go? To Eternity!"

The second paper bears no date, but probably was written subsequently to the first.

"Should I die suddenly (as is probable), organic disease of the valves of the heart will be the cause. There is regurgitation through the aortic valve. I anticipate the result without apprehension, and have long disciplined my

* This I suppose to be the polystethoscope of M. Landensy of Paris, constructed in 1850. Dr. Leared exhibited in the World's Fair of 1851 a binaural stethoscope, and Dr. Williams was in the habit of using one in his class many years before; but they were not self-adjusting, and required three hands to use them. This adjustment with the ear-knobs, and the arms of the metal tubes, a beautiful piece of mechanism which renders the binaural principle applicable and practical, is the work of Dr. Cammann.

mind to view the event calmly. . . . I adore the Being who conceived this mysterious Universe. I submit with awe to His wondrous power, assured that all must prove right, though I understand it not.

"Other refuge have I none,
Rests my helpless soul on Thee;
Overshadow'd by Thy wing,
Let me to Thy bosom flee.

"I have been daily thankful for the blessings I have enjoyed. They have far exceeded my deserts. My wants have been few, my tastes simple. I am satisfied that my fellow-man has received benefit from my professional services, which have been freely rendered to those whom misfortune has prostrated, and to whom poverty has added poignancy to disease. Most of my excitement has arisen from the miseries of life, for which I am thankful, as it has weaned me from the world, and shown me its nothingness." . . .

What a picture does this give us of this self-sacrificing, noble-hearted man! It is sublime in its unselfish heroism, and affords the key to his life. From the time when, on that Alpine precipice, he received the injury that damaged his heart, he trod the narrow path of life beside the precipice of eternity. He never went to his morning labor without feeling that it might be his last. He never lay down upon his bed without feeling that he might not rise from it again. Sudden death was ever present to his mind, and his daily walk and conversation were in preparation for that event. Perhaps this is why he had no enemies; for he never met a friend without thinking he might never see him again. He speaks of occasional irritability, but no one but himself ever observed it.

Mrs. Cammann could not believe that his diagnosis was correct; she thought that long and too intense study had rendered him nervous on the subject of disease of the heart, and she so expressed herself. He apparently coincided in her opinion, and resumed his usual manner.

On the 30th of January, 1863, he found himself seriously ill. He had recently been much engaged in professional duties, and the day before had passed several hours with damp feet. He felt chilly, and, upon reaching home in the afternoon had a rigor, and went immediately to bed. As he seemed no better on the Sunday following, Mrs. Cammann called in Dr. Peugnet, who detected decided symptoms of pneumonia, with more or less of fever and nausea. On auscultation, the respiratory murmur was found obscured over the middle lobe of the right lung, accompanied with fine crepitant *râle*, but was distinct over the upper and lower lobes; dullness on percussion was slightly marked over the middle lobe. There was a loud diastolic murmur, and a slight systolic one at the base of the heart. When his attention was called to it, he observed that he had had it a number of years.

On Thursday, February 5th, Drs. Peugnet and Learning saw him together, and found the heart laboring, and occasionally intermitting. There was a soft systolic murmur over the aortic valve, and a prolonged diastolic one of high pitch. The inflammatory symptoms showed no abatement for several days; but, on the 13th, the attending physicians reported a decided improvement in both rational and physical signs: the patient could lie on the right side, which he could not do before, and the paroxysms of coughing, which had been violent, had nearly disappeared. The following is extracted from a paper read before the Academy of Medicine immediately after his death:—

"Saturday, February 14th, 8½ A.M. Dr. Learning found him in his arm-chair; had spent a comfortable night, although he had not slept much; his cough had ceased to annoy him; he spoke of his rapid improvement, and said he would not trouble the Doctor to come up again, unless he grew worse.

"9½ A.M. Had eaten a hearty breakfast; and, after standing before the fire, he walked into his bedchamber,

with Mrs. Cammann by his side, speaking pleasantly of his ability to run and lie down on the bed. While Mrs. Cammann was closing the blinds, he suddenly called to her to throw open the windows, for he could not breathe. Dr. Peugnet was called in haste, and found him pulseless, gasping, heart contracting feebly, only a slight impulse in the carotids. He died calmly at 10 A.M."

(To be Continued.)

Army Medical Intelligence.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., March 1, 1864. }

CIRCULAR No. 5.—Surgeons in charge of General Hospitals are hereby positively instructed that when a soldier is discharged from service on account of *wounds received in action*, that fact will be entered both on the Discharge and Final Statement of the soldier.

By order of the Acting Surgeon-General.

ORDERS, CHANGES, &c.

Surgeon A. Wood, of the 1st Massachusetts, has been relieved from his present duties, and will report at once to his regiment for duty therewith.

Surgeon William Clendenin, U.S.V., has been relieved from duty as Acting Medical Inspector, and is assigned to the position of Assistant Medical Director, Department of the Cumberland, at Nashville, Tenn., relieving Surgeon A. H. Thurston, U.S.V., who has relieved Surgeon John McNulty, as Medical Director, 12th Army Corps.

Surgeon J. McNulty is at Tullahoma, Tenn., slowly convalescing from his severe injury (contusion of the brain, caused by a fall from his horse while on duty); is able to sit up and walk around his room, and expects to be fit for hospital duty in six weeks.

Surgeon Enoch Pearce, U.S.V., having reported at Louisville, Ky., has been ordered to report to Surgeon A. C. Swarzwelder, for duty in charge of Branch 15, of General Hospital No. 3.

Acting Assistant-Surgeon Samuel M. Work, U.S.A., is relieved from duty in Louisville General Hospital No. 3, and his contract is terminated at his own request.

Surgeon B. B. Wilson, U.S.V., has been assigned to duty as Medical Director of the Defences of New Orleans, La.

Surgeon Lewis D. Harlow, U.S.V., is relieved from duty in Division No. 3, General Hospital, and assigned as Surgeon in temporary charge of Officers' Division, General Hospital, Chattanooga, during the illness of Assistant-Surgeon C. C. Byrne, U.S.A. On the recovery and resumption of duty by Assistant-Surgeon Byrne, Surgeon Harlow will report for orders to the Medical Director of the Post.

Surgeon C. L. Allen, U.S.V., having reported for duty at Headquarters, Department of the South, has been assigned to the charge of General Hospital No. 2, Beaufort, S. C.

Surgeon S. W. Gross, U.S.V., has been assigned to duty as Chief Medical Officer, Northern District, Department of the South, Folly Island, S. C.

Surgeon J. D. Strawbridge, U.S.V., has reported at Harrisburg, Pa., as Examining Surgeon of Volunteer Recruits.

Dr. A. M. Peables, of Auburn, Me., has been appointed Assistant-Surgeon of the 30th Regiment, U.S. Colored Troops.

The General Hospital, Benton Barracks, St. Louis, Mo., has been discontinued, and will be used as a Post Hospital.

The resignation of Assistant-Surgeon J. W. S. Gouley, U.S.A., has been accepted by the President.

Assistant-Surgeon J. W. Applegate, U.S.V., has been assigned to duty in the Office of the Chief Medical Officer, Morris Island, S. C.

Leave of absence, for twenty days, has been granted to Surgeon F. G. Snelling, U.S.V., and to Assistant-Surgeon H. C. Roberts, U.S.V.

Assistant-Surgeon Charles J. Kipp, U.S.V., has been relieved from duty at Nashville, Tenn., and assigned to the Military Prison Hospital, Camp Morton, Ind.

Surgeon S. J. W. Mintzer, U.S.V., has been relieved from duty at General Hospital, McMinnville, Tenn., and assigned to the 2d Division, 14th Army Corps, Army of the Cumberland.

Dr. Adolphus Green, of Missouri, to be Assistant-Surgeon 32d U. S. Colored Troops, March 4, 1864.

N. J. Gibbs, L. C. Kincaid, of the U.S.A., John B. Hoffman, S. P. Moore, S. Haight, of the U.S.V., E. M. Battles, C. Kern, R. J. Mulhern, of Washington, D. C., E. C. Brigham, of Massachusetts, J. C. Knowles, of Rhode Island, E. Nash, of Vermont, F. Weller, W. F. Johnson, Hollis Stedman, Theodore Trivett, of New York, H. P. Calahan, Theodore G. Paul, Edwin French, of Pennsylvania, Wm. J. McClintock, of Missouri, J. L. W. Huntington, of Virginia, J. L. Yates, of Maryland, H. C. Pierson, of New Jersey, and Lewis S. Pilcher, of Michigan, have been appointed Hospital Stewards in the U.S.A.

Appointments confirmed.—The Senate has confirmed the appointment of Medical Inspector Joseph K. Barnes, U.S.A., to be Medical Inspector General, U.S.A., with the rank of Colonel.

Appointments declined.—By Assistant-Surgeon A. A. Ames, 7th Minnesota Vols., the appointment of Assistant-Surgeon to a regiment of Colored Troops.

Discharged.—Hospital Steward William G. Stevens, U.S.A., honorably, at his own request, February 24, 1864.

Surgeon Alexander Shaw, 29th Iowa Vols., on the report of his commanding General, mustered out of service from date of muster in, he having rendered no service with his regiment, August 6, 1863.

Assistant-Surgeon Christopher R. Blackall, 33d Wisconsin Vols., honorably discharged, on account of physical disability, provided he shall sa-

tisfy the Pay Department that he is not indebted to the Government, February 27, 1864.

Medical Cadet Francis A. Atkins, U.S.A., honorably discharged at request of the Secretary of the Navy, to accept the appointment of Acting Assistant-Surgeon, U.S.N., February 27, 1864.

Hospital Steward John W. McFadden, U.S.A., to accept a commission in the U.S.V., February 29, 1864.

Hospital Steward S. W. Reynolds, U.S.A., he having been appointed 2d Lieutenant, 4th U.S. Colored Troops, February 27, 1864.

Orders revoked.—By direction of the President, so much of Special Orders No. 28, current series, from the War Department, as dismissed Surgeon William H. Thayer, 14th New Hampshire Vols., from the service of the United States, is revoked.

Upon the recommendation of the Military Commission, of which General Ricketts is President, so much of Special Orders No. 43, current series, from the War Department, as dismissed Assistant-Surgeon E. W. Buck, 81st New York Vols., is revoked, and he is restored to duty, provided the vacancy has not been filled.

Dismissed.—Hospital Chaplain John A. Spooner, U.S.A., having failed to appear before the Military Commission, of which General Ricketts is President, within the prescribed time, is, by direction of the President, dismissed the service of the United States, for absence without leave, February 8, 1864.

Leave of absence.—Leave of absence has been granted to the following Officers:—

Surgeon Frank M. Hiester, U.S.V., for thirty days, on Surgeon's Certificate of Disability.

Surgeon J. R. Ludlow, U.S.V., permission to visit Washington city, while on leave.

Surgeon E. C. Clarke, 1st New Hampshire Cavalry, by Special Orders No. 25, current series, Headquarters, Department of the Gulf, and has been extended thirty days.

Assistant-Surgeon E. F. Brisbane, U.S.V., for thirty-five days, on Surgeon's Certificate of Disability.

Surgeon Charles McMillan, U.S.V., Medical Director, 15th Army Corps, on Surgeon's Certificate of Disability.

Medical News.

COMMENCEMENT OF BELLEVUE HOSPITAL MEDICAL COLLEGE.

—The third Annual Commencement of the Bellevue Hospital Medical College was held March 3d, at the Academy of Music. The interest which the public take in this institution was evinced by an unusually crowded house. Prayer was offered by the Rev. Dr. Beach. The President of the Faculty, Prof. Isaac E. Taylor, conferred the degree of Doctor of Medicine upon the members of the graduating class. The Hippocratic oath, containing the usual injunctions of professional ethics and etiquette, was first administered, after which the students who were to receive the grade passed upon the stage, applause greeting the representatives of the various States as their names were announced. Ninety-seven received the degree, whose names are as follows:—

Joseph H. Reynolds, Ill.; Charles L. George, N. Y.; Stobbins Foskit, Mass.; Edwin N. Colt, Jr., N. Y.; James H. McCunn, Ky.; Casimero Jose Sacz, Cuba; M. Everett Dwight, N. Y.; Charles F. Dutton, Ohio; Abner Martin, Mo.; Benjamin F. Hart, Ohio; Norton Wolcott, N. Y.; William E. Roberts, D. C.; James Reagles, Jr., N. Y.; Benjamin Tappin, Jr., Ohio; Geo. E. Walton, Ohio; Geo. Gamble, Ohio; James H. Franklin, N. H.; David Munroe, N. Y.; William E. Schenck, N. J.; William B. Lane, N. J.; Wm. M. Tuttle, Mo.; Edward R. Wheeler, Mass.; Jos. H. Chittenden, N. Y.; Jas. T. Tutill, N. Y.; Oscar A. Lewis, Ind.; Thos. R. Pooley, N. Y.; Robert H. Cooke, Ind.; John Kirkir, West Va.; Samuel B. Church, N. J.; Watson Porter, N. S.; S. Wesley Burns, N. S.; Alexander Lowe, Cal.; Charles L. Nelden, N. J.; Gilbert Thickstun, Pa.; Wm. H. Harrison, Wis.; William Beebe, Ohio; Franklin Booth, N. J.; William T. Lusk, N. Y.; Peter Moffatt, Canada; Geo. H. Fasset, Vt.; J. King Robinson, Cal.; Thos. K. Whittemore, Mass.; Geo. C. Lawton, N. Y.; John T. Cole, Mass.; Joshua W. Beede, N. H.; Geo. T. Perry, N. H.; Robert F. Baker, Ill.; Simon D. Dubois, New York; Oliver G. Sherman, Wm. J. Brandon, Tenn.; Robert E. Porter, Lewis D. Kastenbine, Ky.; G. Augustus Kretzhmar, Joseph D. Little, Wesley C. Earle, Myron M. Wheeler, Israel Prior, Rid. M. Wykoff, N. Y.; Joseph Dennissen, N. S.; John M. McCort, Alphonso D. Rockwell, Robert F. Brooks, Thos. C. Bradford, Orin Britton, Jr., Ohio; Marshal B. McGausland, Canada; Henry A. Inloes, William G. Harrison, Jr., Md.; Alonzo D. Birchard, Pa.; Joseph G. Rogers, Ind.; Wm. J. Brandon, Tenn.; Henry B. Ely, Mich.; Thateher S. Hanchett, Mass.; Napoleon B. Crawford, Ill.; Willard G. Maynard, Ind.; Lawrence V. Cortelyou, N. Y.; T. Joshua Edwards, Cal.; Wm. G. Stevenson, N. Y.; Edward M. Jenks, Vt.; George Howard Marvin, New York; Daniel M. Benchreak, Pa.; Geo. W. Emerson, Mass.; Lemuel L. Tozier, N. Y.; J. Bayley Dene, Md.; Frank Livermore, Mass.; Aaron Ely, Canada; J. Kyle, Berkebill, Md.; J. Sprigg Underwood, Ill.; Joseph H. Putnam, N. Y.; Russ B. Brownell, Conn.; Dowe T. Tauman, N. Y.; Artemas F. Soule, Cal.; Ell P. Miller, N. Y.; James T. Young, D. C.; Charles R. Metzler, N. S.

Two members of the class, Eugene O. Rowe, N. Y., and Chas. E. Harris, N. S., deceased, having passed examinations and amply earned the honor, received the degree as a testimonial of respect, in a very impressive ceremony, in which Dr. Taylor made a most honorable and touching allusion to their worth and merit. The addresses to the

graduates were delivered by Prof. Flint, who reminded the gentlemen just presented with the evidence of their acquisitions in the lecture room, of the several aims which should actuate them in the profession of which they had now become members. They should use the proper means for securing favor; they should keep pace with the advancement of medical knowledge; they should even aspire to contribute themselves to that advancement; and, above all, should remember that not talent so much as attention and timely adoption of proper methods and habits is the most essential condition of success. Wm. T. Lusk, of the Graduating Class, delivered an eloquent valedictory, in which he held up Jenner as the model physician. Addresses were also delivered by the Hon. Simeon Draper, President of Commissioners of Public Charities and Correction, and of the Board of Trustees; and Geo. F. Tallman, Esq., of the Board of Trustees. The Rev. Dr. Chapin, who was introduced, responded in a most eloquent and thrilling speech, praising the purposes and the method of the institution, whose object was to combine the development of medical science with the alleviation of human suffering. He praised its adaptation to the requisitions of the age and of the country; that it was not trammelled by human tradition, but studied nature at first hand; and paid a tribute of respect to the independence, liberality and benevolent spirit of the medical profession, and closed by commending the Bellevue Hospital Medical College to the interest and support of the people. The benediction was offered by the Rev. Dr. Beach, when the audience dispersed.

COMMENCEMENT OF THE UNIVERSITY MEDICAL COLLEGE.—

The Annual Commencement of the Medical Department of the New York University was held March 4th, in the chapel of the University Building, in the presence of a large assemblage. The members of the Faculty, among whom were Dr. Valentine Mott and Dr. Paine, occupied the platform. The venerable Chancellor Ferris presided, and opened the exercises with a selection from the Scripture and prayer, after which he conferred the degree of M.D. upon the following members of the graduating class:—

Joseph W. Alsop, Jr., Ct.; E. R. Bardin, Ct.; Nelson W. Bates, George Beebe, C. E. Billington, N. Y.; Edwin G. Brady, Ohio; Edward V. Brown, Marvin S. Buttler, Iretus Z. Cardner, N. Y.; Frank T. Chadwick, N. J.; George B. Cornell, Mass.; Frank Cottle, Albert H. Crump, Gottlieb T. Donner, N. Y.; Thomas W. Dresser, La.; Wm. W. Eaton, Me.; John T. Goddard, Ct.; Charles A. Gorse, N. O.; Edward M. Gonzales, Cuba; Charles L. Green, Ct.; Stephen S. Green, Vt.; Wm. R. Hamilton, Pa.; Gideon Hawley, Central America; Jas. W. Hughes, De Forest Hunt, George W. Johnston, N. Y.; Eli V. Rendig, Ohio; Jas. E. Kirkpatrick, Ill.; Jas. Lawyer, N. Y.; Robert J. Lemont, N. B.; Josef T. Martinez, Cuba; Nathaniel Matson, Augustus T. Mills, N. Y.; Chas. M. McLaurie, Ill.; Dr. McClary, N. Y.; James Moore, N. B.; Charles W. Neff, Md.; George W. Newman, Charles O'Hanlon, Cornelius O'Leary, Jeremiah O'Leary, N. Y.; George C. Raynolds, Conn.; Henry Riehing, Ill.; Joseph H. Robinson, Jos. H. W. Scott, Conn.; Wm. U. Selover, N. J.; James W. Sibley, Nova Scotia; Carlou W. Spicer, Mo.; Samuel B. Smallwood, N. Y.; Joseph Stedman, Mass.; Theodore H. Studdiford, N. J.; Bliss S. Thorn, N. B.; Hiram Warren, Conn.; James G. Webster, Ind.; Leander R. Webster, Pa.; H. Goodell Whitehall, Faneuil D. Weiss, Davis T. Whyborn, N. Y.; Allan N. Williamson, Mass.

Certificates of Honor were awarded to the following:—

James Moore, N. B.; Charles M. McLaurie, Ill.; Gottlieb T. Donner, Cornelius O'Leary, Jeremiah O'Leary, N. Y.; Wm. V. Selover, N. J.; Ed. M. Gonzales, Cuba; Faneuil D. Weiss, N. Y.; Geo. B. Cornell, Mass.; John T. Goddard, Conn.; George W. Newman, Nathaniel Matson, N. Y.

The following prizes were then awarded:—Prof. Mott's bronze medal, to Dr. Charles M. McLaurie; Prof. Metcalf's 1st prize, a pocket case of instruments, to Dr. James Moore; 2d prize, a case of instruments for post-mortem examinations, to Mr. Wm. H. B. Post. An excellent address was delivered by Dr. Charles A. Budd, and the exercises were closed with a benediction.

DR. WM. B. ATKINSON, of Philadelphia, has issued a volume of discussions in the Medical Societies of Philadelphia.

THE honor of knighthood has been conferred on Dr. Wm. R. Wilde, of Dublin, in recognition of the services rendered by him to statistical science, especially in connexion with the Irish census. Dr. Wilde is favorably known in this country as the author of a work on the diseases of the ear.

Original Lectures.

LECTURES ON GUNSHOT INJURIES OF THE CHEST.

By FRANK H. HAMILTON, M.D.,

PROF. OF MILITARY SURGERY AND FRACTURES AT BELLEVUE HOSP. MED. COLLEGE, AND LONG ISLAND COLLEGE HOSPITAL; SURGEON TO BELLEVUE HOSPITAL; LATE MEDICAL INSPECTOR, U.S.A.

LECTURE III.—PART II.

Penetrating Gunshot Wounds of the Chest; or those in which the Missile has entered the Cavity of the Thorax, but has not escaped.

It may be assumed, Gentlemen, that the surgeon will never permit a case of this kind to pass without a careful examination, to ascertain, if possible, whether the ball may not be found. For this purpose, he will explore the wound cautiously with his finger or with a probe, bearing constantly in mind that if it has once fairly entered beneath the ribs the chance of success is very small; and that he is, therefore, much more likely to do harm than good by a prolonged exploration. If it is in the pleural cavity it has almost certainly fallen away from the point of entrance; and if it has penetrated the lungs the change in the position of the wounded lobe will render it impossible to follow its track; nevertheless a certain number of rare and fortunate examples of success will warrant an examination, if it is properly made.

If the ball is not found at or near the wound, then an examination should be instituted to determine whether it is not under the skin at some opposite point of the body; and for this purpose the finger should be passed carefully over a large portion of the opposite surface, upwards and downwards, and to the right and left, for it is impossible to say how much it may have been deflected from its course.

If the ball remains fairly within the cavity of the chest, no doubt the prognosis must be very grave. Most of these patients sooner or later die, as a consequence of the irritation occasioned by the presence of the foreign body. McLeod says, that of thirty-three cases in which the ball lodged in the chest, or appeared to lodge, only two finally recovered.

The records of military surgeons furnish other examples of permanent recoveries after such accidents, and among them I remember to have seen it stated somewhere that the *post-mortem* examination of the body of Prince Jerome, who died a few years ago, led to the discovery of a ball which had remained in his chest after a duel which he fought in his youth with Marshal Davoust. McLeod mentions a case in which a ball became sacculated in the lower lobe of the lung, and although he died six months after the receipt of the injury, his death was not occasioned by the ball. Percy speaks of three similar cases; Mr. Arnot found the fragment of an iron hoop lodged in the lungs, which had been there fourteen years; and Boyer found a ball which had been lodged twenty years.

I will read to you a few cases which have come under my own observation, accompanied with a brief notice of their results so far as I have been able to ascertain them. None of them have been traced through a very long period of time, but you will see that they do not generally give much promise of a final recovery:—

Willis R. Haley, 12th N. Y. Cav., wounded at South Mountain, Md., Sept. 14, 1862. The ball entered the back, on the right side of the spine, near the tenth dorsal vertebra. He expectorated blood very freely for about six hours, and had extensive emphysema over the back. I found him on the 26th day with an open, suppurating wound and considerable cough, but his breathing was unembarrassed.

Erasmus Doyle, 166th N.Y.V., wounded June 14th, 1863, in the famous charge upon the batteries at Port Hudson, Miss., made by General Sherman. He was in the act of

charging up the hill, with his body bent forwards, when the ball was received. It entered just above the spine of the right scapula, penetrating the thorax. He spat blood more or less for eleven days, and air escaped freely from the wound. On the 6th of Dec., 1863, nearly six months after the accident, the wound was still open, and small fragments of bone were occasionally being thrown out. He had a troublesome cough, and his breathing was hurried.

Wm. H. Harris, 2d Wis. Vol., wounded at South Mountain, Sept. 14, 1862, by a ball, which entered the chest in front, one inch outside of the left nipple. It has never been found. He expectorated a small quantity of blood immediately, and this continued for three or four days. Air never escaped from the wound; his respiration and the heart's action have never been disturbed; he has had no cough, and on the 26th day, when he came under my notice, the external wound was entirely closed.

This case is so extraordinary in its results that I entertain some doubt whether the ball was not withdrawn by the clothing. It is possible, however, that it remains in the chest.

Ephraim Wood, private in Andrews's regt. of Sharpshooters, was wounded on the 17th of Sept., 1862, at Antietam. The ball entered on the right side, between the second and third ribs, two and a half inches from the sternum. He did not expectorate blood until the third day, and the bleeding never recurred. On the 23d day I found the wound open and discharging. He had a cough; his respiration was embarrassed, and he looked feeble.

Edward M. Bliss, 15th Mass. Vol., wounded by a ball Sept. 17, 1862. The ball entered the right side of the thorax near the upper part, and has never been found. He raised some blood immediately, but none since. On the 24th day the wound was still open; he had some cough, but his general condition was very good.

Hugh Gallagher, 6th Wis. Vol., wounded at South Mountain. A ball passed through the right shoulder and entered the thorax on the right side. I saw him on the 26th day. He expectorated blood immediately after the receipt of the injury, and several times subsequently. When I saw him his expectoration was rusty, and his breathing somewhat embarrassed, but he was looking very well. The wound had not closed.

J. Hard, 7th Wis. Vol., wounded on the 14th Sept., 1862, at South Mountain, by a ball, which penetrated the sternum, near the point where it unites with the right clavicle. The ball could not be found. He expectorated some blood, and on the 26th day the wound was still open. He had some cough, but his breathing seemed unembarrassed.

During the battle of Fair Oaks, on the 31st of May, 1862, Colonel Bailey's battery of six guns was posted on a slight elevation in the rear of the 96th, 98th, and 100th N. Y. Vols. The enemy was in the woods, a few hundred yards in front, and Colonel Bailey was compelled to fire over the heads of our own men. My position, as Medical Director of Major-General Keyes's Corps, rendered it necessary that I should remain near the front until my ambulances came up; and I was able to see from where I stood the line of battle perfectly, and to note the fortitude with which, for more than two hours, General Casey's small division on the extreme front and left withstood the terrible assault which was made upon it. I mention this because it has been said they did not fight well. The truth is, no troops ever fought better. The gallant Col. Bailey lost his battery, but not until he had sacrificed his life. The whole of Casey's division did not at this moment amount to more than 3500 effective men, and of these, the reports made to me three or four days after, showed 233 killed, and 943 wounded—a total of 1176—but in addition, 669 were reported missing, most of whom it was afterwards ascertained were either killed or wounded, some being made prisoners. It is certain, therefore, that one-half of the whole number were either killed or wounded, and those of us who went over the field after the second

day's battle, when we recovered the ground we had lost on the first day, will remember that most of these brave men lay in front where the line of battle had been first formed.

You will pardon this digression, gentlemen, but I could not omit to avail myself of the opportunity to do justice to these men. On some other more suitable occasion I intend to speak of this battle more fully.

I have said that during the engagement Col. Bailey's battery was firing over the heads of our own men, and a part of the time the enemy was so near that the Colonel was compelled to use grape and canister. The grape was heavy enough to go over the troops fairly, but a good deal of the canister fell short. Very soon some men were brought to me, who said we were killing our own men; and I was informed that at one point several were killed and wounded at one discharge. "The canister fell about like hail," they said. Among those who were wounded in this way was Corporal George H. Williams, of the 98th N. Y. Vols. He was standing, he said, close up to a rail fence, and had not yet seen a rebel, when a canister shot entered his back, nearly opposite the middle of the base of the left scapula, between it and the spine, and passed into the left lung. He fell immediately, and was carried to the rear. For half an hour the blood escaped from the wound and from the trachea freely; it then ceased spontaneously, and never recurred. The ball could not be found. The wound, which was very large, was dressed with lint and a roller.

He was subsequently sent to the White House, Va., and from thence to Annapolis. On the 3d of Sept., 1862, three months after the receipt of the injury, he returned to Yorktown, Va., where I was then stationed with Major-Gen. Keyes, to obtain his discharge. The ball still remained in his chest; the wound was open and discharging healthy pus; for some weeks past he had been annoyed with a violent and irregular action of the heart, which was much increased by exercise or mental excitement; he had some cough; there was dulness over the left lower pectoral region, yet his general appearance was very good. I have not heard from this man since.

In connexion with this subject, gentlemen, I think it proper to speak of those metallic corselets or breastplates, and complete cuirasses, which have been furnished occasionally to the army by ingenious and humane artisans, and of which, I am happy to say, but few have ever been worn by either officers or men—at least so far as my experience goes. Some have been made of wire, I believe, and are composed of links, resembling the linked or chain armor worn by the knights and soldiers of olden times, before powder and guns were invented. These I have never seen in use. I show you, however, two, made of plates of iron, hinged and bolted, which were worn in battle by officers during the present war; and, so far as I know, these are all that have ever been worn by persons of my acquaintance. One of them never felt a bullet until it was tried by me as a target, and after the owner had thrown it aside. The other was worn by a captain, and he was killed in the first severe action in which he was engaged. The ball—a conical ball—entered the breast-plate, near its upper and anterior margin, and perforating it, passed through the chest, severing some of the larger vessels. He was found upon the field dead. In this instance, the ball having struck the armor at a right angle with the surface, and at a short range, no protection was afforded.

Surgeon David Prince, the able and indefatigable Medical Director of Couch's Division of the 4th Corps, Army of the Potomac, reported to me, after the battle of Fair Oaks, that "in several instances bullets were arrested by breastplates." In one case a breastplate was penetrated by a minié rifle-ball, but its force was so nearly expended after perforating the metallic plate, that it merely entered beneath the skin; and then, passing along superficially over the muscular walls of the abdomen, it was found lying beneath the integument upon the opposite side. This was on the person of Capt. —, of the 1st Long Island Vols.

No doubt, these plates have firmness enough to turn aside missiles whose force is partially arrested, or which strike obliquely; but some of them protect nothing but the chest and a small portion of the abdomen, leaving many vital parts wholly exposed; and their little value, therefore, as a means of defence, is more than counterbalanced by their weight, which is not less than eight or ten pounds; and so long as swiftness of movement is the prime element of successful tactics and strategy, such cumbersome and imperfect armor can have nothing to recommend it to soldiers—certainly not to infantry.

Further than this, I am of opinion that it demoralizes a soldier very much in the same way that too much fighting under the cover of breast-works is known to do. Troops accustomed for a long while to lie behind raised lines of defence do not stand or charge well upon an open field. They exaggerate the danger; and an officer or soldier, one portion of whose body is securely protected, must be constantly reminded of those parts which are not at all covered. He will say to himself, "My breast is safe, but alas! my poor head, and my poor belly." He never can acquire in battle that enthusiasm and perfect abandon which characterize the true soldier, and inspire courage and confidence into all about him. In short, I think, it will make him a coward, if he was not one before.

Treatment of perforating and penetrating gunshot wounds of the chest.—We have already indicated certain steps of the treatment, namely—the removal, as far as practicable, of all foreign substances from the wound; the ligature of bleeding arteries, etc.; but other important considerations remain.

I may state in general terms that, in most cases, the wounds should be left open to allow of the free discharge of blood and of matter, only being covered lightly with a piece of lint wet with cool water. The patient should be kept very quiet for a few days, and as much as possible required to lie in such a position that the discharges will flow easily from the thoracic cavity through the wound; by which position, also, the opposing pulmonary and thoracic pleural surfaces will be approximated, and perhaps brought into contact near the track of the wound, and adhesion will thus be favored; a result which, if obtained, will diminish greatly the chances of an extension of the inflammation along the pleura, and probably prevent the occurrence of pneumo-thorax, hydro-thorax, or pyemia.

With regard to posture, however, it must be understood that the patient will generally be obliged to consult chiefly his own immediate comfort in breathing.

If the patient suffers much from pain, or if he has a troublesome cough, opium or morphine may be given; and when inflammation begins to arise, cathartics and bleeding, with a rigid diet, may become necessary. In relation to agents of this latter class, employed for the purpose of lowering the vital forces, I need scarcely say that they are not always demanded; a large proportion, probably much the largest proportion of wounded soldiers whom I have seen, were in a condition requiring at first stimulation; and during all the subsequent progress of the case, requiring to be sustained by at least good, plain, nutritious food. Upon this point the surgeon must exercise a careful discretion.

Military surgeons have of late been generally agreed that in most cases gunshot wounds of the chest ought not to be immediately closed. This is in accordance with the general statement of my own views which I have already made. Recently, however, Assistant-Surgeon Howard, of the U.S.A., has recommended an opposite practice. He proposes, having first removed as far as possible all foreign substances, to hermetically seal the external wound at once. In order to accomplish this more certainly, he pares away with a sharp knife the contused margins of the wound down to the bone or to the pleura, giving to the external wound an elliptical form; and then approximates the edges with silver sutures, which are introduced at very short intervals, and made to penetrate deeply; over the whole surface of the wound he now spreads collodion, in which

the fibres of loosened charpie are imbedded to prevent more effectually the separation of the wound. A compress and bandage may be added, if necessary.

Dr. Howard claims for this method that it will assist in controlling the hæmorrhage; that it will relieve the dyspnoea, and prevent or diminish suppuration.

It is perhaps scarcely proper to attempt a criticism of these views at this moment, since the results have not yet been given fully to the profession. It will be proper, however, to state that this practice, in a form more or less modified according to circumstances, has been recommended and adopted in penetrating or perforating wounds of the chest made by sharp instruments; in all penetrating or perforating wounds of the abdomen whether gunshot or incised; and in all gunshot wounds of the chest accompanied with severe and alarming hæmorrhage from the pulmonic vessels. The novelty consists in the application of this method to *all* wounds of the chest; and it is precisely this exclusive view of the practice to which surgeons will hesitate to give their approval.

I will attempt to indicate to you what thoracic wounds seem to me to demand or permit immediate closure of their external orifices.

First.—All simple incised and punctured wounds; in which class of accidents ample experience has shown that we have not much to fear from suppuration, and that we may reasonably expect union by adhesion throughout the whole course of the wound.

Second.—All wounds made by smooth round balls or shot, which have not come in contact with and broken any portion of the bony parietes, and into which no foreign substance has been conveyed.

Third.—When both pleural cavities have been opened by the weapon or the projectile; since the free admission of air into both sides of the chest would, in most cases, cause death immediately, and it is proper to anticipate and provide against such an occurrence by every possible means.

Fourth.—When the pulmonic hæmorrhage—the blood escaping freely from the external orifices—is very profuse and alarming. In closing the wound, under these circumstances, the purpose would be to allow the blood to accumulate within, with the hope that eventually, and before fatal syncope was induced, the pressure of the coagulated mass upon the wounded lungs would close the vessels. In this case, however, the wound should not be closed by sutures, but with compresses and adhesive straps, in order that, if the pressure of the blood became so great as in itself to threaten death by suffocation, by removing the dressings it might be allowed again to escape.

Fifth.—When it is ascertained that the sense of suffocation is due to the presence of air in the pleural cavity and not to blood; if at this moment the external wound is open, it will be proper to close it, temporarily at least, and to keep it closed so long as the breathing is thereby relieved.

The cases which remain after this enumeration, and in which we cannot from our present experience advise a closure of the wound, are:—

First.—Gunshot wounds made by conical rifle-balls, and by all projectiles of a larger size (with the exceptions as to pneumo-thorax, pulmonary hæmorrhage, and perforation of both cavities already stated).

Second.—Gunshot wounds made by any form or size of projectile, in which fragments of bone or other foreign substances have been sent into the cavity of the chest and cannot be removed.

Third.—"Penetrating" gunshot wounds, or those in which the missile itself remains within the chest.

In not one of these latter cases would it seem proper to me to hermetically seal, or even close temporarily, the external orifices of the wounds. The very rare examples of recovery from such injuries, without excessive suppuration, do not warrant a reasonable expectation of a result so desirable.

A large majority of those who have died after the lapse of a few days or weeks, from gunshot wounds, are found to

have considerable collections of pus within the pleural cavities, or in the structure of the lungs; and these collections appear frequently to have been the immediate causes of death. If closing the external wound over the contused and ragged track of these larger missiles, often made more ragged by spiculae of bone, shall be found to diminish the frequency and fatality of these thoracic abscesses, the profession and the world will be greatly indebted to Dr. Howard. This is what I understand him, among other things, to claim for his plan of treatment, and I shall wait for the result of his observations with the most profound interest.

Original Communications.

ON GUNSHOT FRACTURES OF THE PELVIS,

WITH A CASE IN WHICH

THE ILIUM WAS TREPHINED, IN ORDER TO EXTRACT THE BALL.

By JOHN A. LIDELL, M.D.,

SURGEON U.S. VOL., IN CHARGE OF STANTON HOSPITAL.

The injuries of the pelvic bones inflicted by fire-arms are always dangerous; the principal risk being that of purulent infection, from which it appears that gunshot wounds involving any bone of the pelvis are more likely to prove fatal than similar wounds involving any other bone in the body. Excluding the cases wherein the injury of bone was confined to the crest of the ilium, or to the spinous processes of the sacrum, and excluding also those cases wherein the injury of bone was complicated with injury of the pelvic viscera, causing fatal hæmorrhage or fatal peritonitis, nearly every case of gunshot wound with fracture of a pelvic bone has, according to my experience, terminated in fatal pyæmia. On this point, Stromeyer, speaking from experience acquired in the Schleswig-Holstein campaign, says that "all those cases ended fatally where the bullet, penetrating the pelvis posteriorly through the thick muscles of the back, had either broken off large portions of the ilium, or had simply penetrated it. The patients, after suffering great pain, died with symptoms of pyæmia, after the wound had become sloughy. On examination, besides evidences of pyæmia, the injured bones were found laid bare of periosteum to a great extent around, and bathed by large quantities of bloody serous exudation. In one case I was able to extract the bullet from its position, in the middle of the ilium, by a tire-fond; however, death was not prevented."—(*Statham's Stromeyer*, p. 42. Am. edition.)

This special liability to the occurrence of purulent infection is probably due, in part, to the *situation* of the pelvic bones, being in the trunk; for observation has shown that, in gunshot wounds of the extremities, the risk of fatal pyæmia increases in a pretty constant ratio as we approach the trunk. Thus, patients wounded in the leg are attacked with pyæmia more frequently than those wounded in the foot; those wounded in the thigh more frequently than those having similar wounds of the leg; and those wounded in the upper third, oftener than those wounded in the lower third of the same limb.

This increased liability to pyæmia appears also to be due, in part, to the spongy structure and great size of the pelvic bones. The loose, porous texture of these bones appears to facilitate the diffusion of suppurative inflammation in them, and a large amount of osseous tissue may be involved before the area of suppuration is limited by their exterior boundaries.

CASE.—Corporal A. M., Co. C, 26th Wisconsin Vols. aged 33, and of robust constitution, was admitted to Stanton Hospital, June 15th, 1863; he had been wounded at the battle of Chancellorsville, May 3d, 1863, by a minié ball, which entered the left hip about three inches below the crest of the ilium. The ball could not be found, and

the wound healed readily. He was furloughed June 29th, 1863, and did not return to hospital till Nov. 27th, 1863. He stated that soon after arriving home the wound again opened, and has continued to suppurate quite freely since, and that during his absence several attempts were made to extract the ball, which did not succeed. On his re-admission to hospital, the wound was explored with Nelaton's probe, and the bullet discovered, lodged deeply in the gluteal region, near to and a little above the hip-joint. There was also synovitis of that joint.

On the 6th of December I dilated the wound, and explored it with my finger, discovering by that means that the bullet had passed through the ilium. The opening in the bone was not large enough to admit the finger, but the extremity of it detected the bullet lying just inside. An effort at extraction was made with Tiemann's bullet-forceps, and failed, because of the smallness of the aperture in the bone. The wound was next still further dilated by incisions, made both upwards and downwards, parallel to the long axis of the thigh, and to the extent of about four inches; a small-sized bone trephine was applied to the posterior edge of the hole in the ilium, and a button of bone removed. This enabled us to extract the bullet with a strong necrosis forceps. The capsule of the joint was felt distended with fluid. The patient, who was under ether throughout the operation, bore the operation well. Dressed the wound with dry lint.

Dec. 7th.—Has some fever; bowels confined; ordered sal Rochelle, \bar{z} .

Dec. 9th.—The wound is suppurating, and he is doing well; directed the wound to be dressed with a weak solution of permanganate of potassa, and milk punch to be administered.

Dec. 10th.—Has pain in the lower part of the abdomen; ordered pil. opii gr. i. every four hours.

Dec. 12th.—Pain in abdomen has ceased; has fever, and no appetite; prescribed quiniæ sulph. grs. ii., morphinæ sulph. gr. $\frac{1}{2}$, acid. sulph. aromat. gtts. x., three times a day, and milk punch continued.

Dec. 15th.—Has fever and diarrhœa, with pain in abdomen; prescribed pil. opii gr. i. every two hours, and milk punch continued.

Dec. 16th.—Diarrhœa has been partially checked; has fever, but his appetite is better. In the afternoon he had a chill; prescribed quiniæ sulph. grs. x. three times a day.

Dec. 17th.—Has had a good deal of fever all night; had to draw off his water this morning with a catheter; has some diarrhœa; ordered quiniæ sulph. grs. v., pulv. opii grs. ii. every six hours, and port wine, $\bar{3}$ ii. every six hours.

Dec. 19th.—Had rigors and sweats, also gastric irritability and diarrhœa; ordered a sinapism to epigastrium, hydrarg. chlor. corrosiv. gr. $\frac{1}{8}$, and potass. iodid. grs. ii. every four hours, with wine.

Dec. 20th.—The diarrhœa has ceased; appetite has improved; the wound looks well, and is suppurating freely; treatment continued.

Dec. 23d.—Has diarrhœa again this morning. The right shoulder-joint is painful, and somewhat swollen; directed the mixture to be administered morning and evening, and pil. opii et camphoræ aa grs. ii. every six hours; diagnosis: pyarthrosis of right shoulder.

Dec. 25th.—Fever; slight delirium; tongue dry and brown; slight diarrhœa; was also icteric.

Dec. 26th.—Is very restless. The shoulder-joint is not so much swollen; wound looks dry and glazed; pulse 120, and full; no appetite. Ordered whiskey, $\frac{1}{2}$ oz. every two hours.

Dec. 27th.—Fever; delirium and sweats continued; diarrhœa quite profuse this morning. Ordered ol. terbinth. gtts. x. every four hours, and whiskey continued.

Dec. 28th.—The diarrhœa is checked; fever and delirium continue. P.M.—His respiration became embarrassed. He complained of a choking sensation about the throat; expectorated a quantity of thick, viscid, and bloody sputa;

tongue dry and brown; diagnosis—pyæmic pneumonia; apply sinapism to thorax, and continue the other treatment.

Dec. 29th.—Is about the same, except that his respiration is less embarrassed; sputa unchanged. Prescribed potass. iodid. grs. ii., aquæ camph. $\bar{3}$ ii. every four hours, and a liberal allowance of whiskey.

Dec. 30th.—The metacarpal joint of the middle finger of the left hand is red, swollen, and painful; fever, sweats, and delirium continue.

Dec. 31st, A.M.—Is sinking; passes his stools in bed. P.M.—Died of pyæmia.

Autopsy twelve hours after death.—Body moderately emaciated; rigor mortis moderate. On opening the thorax about eight ounces of straw-colored serum was found in each pleural cavity; old pleuritic adhesions existed in the right cavity; both lungs were highly congested, and contained numerous nodules of lobular pneumonia, in the stage of hepatization, but no abscesses. Abdomen:—The omentum contained a large quantity of fat; the spleen was about twice the normal size, and contained an abscess about the size of an almond; other abdominal organs healthy. The ball passed through the ilium, about one inch above and to the front of the ischiatic notch. The hip-joint of that side contained pus (pyarthrosis). The right shoulder-joint and the metacarpal joint of the middle finger of the left hand likewise contained pus (pyarthrosis). There was also a small abscess under the left pectoralis major muscle (metastatic abscess). The right auricle and ventricle contained a "heart clot." The left ventricle was empty.

The bullet had barely perforated the ilium, pushing before it the fracture-splinters covered on the inner side of the pelvis by the lower part of the iliacus internus muscle. The iliac fascia was not ruptured. The splinters remained attached to the periosteum. The autopsy also showed that the bone removed by the trephine was newly formed, or in other words, belonged to a bridge-shaped periostosis.

February 24th, 1864.

INTERESTING CASES OF GUNSHOT WOUNDS.

By S. W. GROSS, A.M., M.D.,

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DEPARTMENT OF THE SOUTH.

CASE I.—Penetrating Gunshot Wound of the right lung, and sabre wound of the descending colon.—Private William Lowry, aged 19 years, 3d Regiment Kentucky Cavalry, on the 23d of Dec., 1861, during the retreat of his regiment in an affair with Forrest's rebel cavalry, was shot in the chest from behind, and received a sabre thrust in the back. He fell from his horse, was made prisoner, and remounted; and, after having proceeded three miles, he was left at a farm-house, being too faint to proceed further. A conical pistol-ball had entered between the spine and right scapula, and, traversing the lung, pointed between two of the ribs, an inch to the right of the nipple, and at the same level as that at which it had entered. From the direction of the sabre wound, and from the fact presently to be mentioned, it was evident that the descending colon had been opened. He passed blood by the mouth, but not in any abundance; and for several days the sputa were tinged with the same fluid, and he had a slight cough. The escape of blood from the orifice of the wound was slight.

He fell into the hands of a physician, who gave him, a few hours after the receipt of his injuries, a dose of castor oil, and followed it up in twelve hours with sulphate of magnesia. The copious watery discharges passed almost entirely through the wound in his back, showing conclusively that the descending colon was involved.

I first saw the young man on the 11th of January, 1862, at which time he looked pale and weak, but in other respects he appeared to be well. He could lie in any position, his lung performed its functions perfectly, and he had not been troubled with any evident inflammation of that organ.

The wound in the back had united. I lived in the same house with him until the 18th of February, when he was nearly ready to resume his duties. I had proposed removing the ball, which was wedged between the ribs, the apex being very perceptible to the touch; but marching orders were suddenly received, and I have not seen the subject of the case since.

CASE II.—A conical ball encysted in the right cavernous body of the penis.—At the battle of Shiloh, April 7th, 1862, a private, 16th Regt. U.S.I., received a wound in the penis; but, having been immediately removed from the field, and placed upon a transport, I did not see him until six weeks subsequently, when I examined him with a view to a discharge from the service.

I found that the ordinary conical ball had become encysted in the right cavernous body of the penis, the point of the missile presenting towards, and being about one inch from the pubes. He stated that a good deal of inflammation had followed the injury, but that no efforts were made to extract the ball by his attendant at Evansville, Indiana. He was the father of four children, but had not had any erections since he was wounded. As the missile gave him no pain, I could not induce him to have it removed.

CASE III.—Gunshot wound of the left elbow-joint. Partial resection.—Morris Schneider, aged 23 years, private, Co. I, 23d Regt. Ohio Vols., was struck at the battle of South Mountain, Sept. 16, 1862, by a musket-ball, which passed through the left elbow-joint, at its posterior aspect, producing a comminuted fracture of the olecranon process, but leaving the radius and humerus intact. He was admitted into the DeCamp General Hospital, David's Island, New York, on the 28th of September, when he was looking pale and weak; the whole arm was in an erysipelatous condition; and both orifices of the wound, which readily admitted the index-finger into the joint, were discharging pus and synovial fluid. He was suffering great pain in the wrist, which had been stepped upon while he was on the transport.

I placed him upon the use of the tincture of the chloride of iron and quinine, and applied poultices and dilute tincture of iodine to the limb. Under this treatment, and proper attention to the diet and secretions, the local inflammation subsided; and, on the 8th of October, I made a single longitudinal incision, three inches in length, over the posterior surface of the joint, and removed the olecranon, which was a good deal shattered. The articulating surfaces of the radius and humerus were perfectly healthy, and I left them untouched. No vessels required ligature, and the wound was approximated by silver sutures and adhesive strips.

On the 11th of November the wound had nearly healed; but, as there was but little formation, he was again placed under the influence of chloroform, and the adhesions were broken up. He was discharged from the service on the 15th of December, at which time he had a very useful limb, all the functions of the joint being nearly perfect. Throughout the treatment passive motion was actively resorted to, and for this purpose a modification of Heath's splint was frequently used.

At the expiration of the year 1862, six other cases of resection of the elbow-joint occurred in the same hospital. All recovered, and, with one exception, with a more or less useful limb. One case was a partial resection, and in every respect similar to that above reported. In the remaining five cases the articulating surfaces of all the bones entering into the composition of the joint were removed. The case referred to, in which the result was bad, was that of a captain of a Michigan regiment. The joint was badly shattered, and an oblique portion of the shaft was also removed. Abscesses were of frequent occurrence, and the bone became carious. A secondary operation was performed eight months after the first, and some dead bone removed. The case, however, did no better; and when he left the hospital, four months subsequent to the last operation, he had no use of the joint, and the arm was much enlarged by

fibrinous deposits. The operators in these cases were Acting Assistant-Surgeons Teats, Steele, and Cleveland, U. S. Army.

The following three examples of *gunshot injuries of the skull* came under my observation during my connexion with the DeCamp General Hospital, and demonstrate the liability to exfoliation of the bone, the attendant degree of concussion of the brain, the gravity of the symptoms of cerebral disorder following the injuries; and, considering the primary and secondary danger of all such wounds, the favorable results obtained.

CASE I.—Gunshot injury of the skull, with linear fracture and depression of the internal table, and necrosis of bone.—C. C. Blake, aged 23 years, private, Co. G, 2d Reg, U.S. sharpshooters, was struck upon the vertex by a buckshot and ball at Antietam, Sept. 17, 1862, the injury being followed by temporary symptoms of concussion of the brain. At the expiration of an hour he was able to walk with some difficulty to a field hospital, a short distance in the rear, but found that his lower extremities, especially the left, felt very numb, as did also his arms, but only in a slighter degree. The scalp wound was about two inches in length by one inch in breadth, but his skull was pronounced to be uninjured, and cold water was applied. Two days subsequently he walked to Frederick, a distance of twenty miles, where a portion of his hat and some hair were removed from the wound, and adhesive strips applied, the parts having previously been shaved.

The man was sent to Washington, when he was told that there was no fracture of the skull, and arrived at the DeCamp General Hospital, on the 28th of September. Act. Asst. Surg. E. B. Roor, U.S.A., under whose charge he came, at once detected a fissure of the right parietal bone near the sagittal suture, and at the expiration of a week, with a view to a more thorough exploration, cut down upon the parts, removed some small necrosed fragments of the external table, and found the fissure to be upwards of two inches in length. Five days subsequently, portions of both tables were removed, exposing the dura mater to the extent of the size of a ten cent piece, and the internal table was elevated, being depressed about four lines. For a month after the receipt of the injury the patient suffered from severe neuralgic pains over his eyebrows, which extended through the right temple to the seat of the wound. These gradually became more severe, especially when he drank tea or coffee, but completely disappeared upon the elevation of the depressed bone. The same is true of the numbness of the left leg, which had existed up to the date of the operation, that of the right leg and upper extremities having continued only a few hours after the receipt of the injury.

Blake was discharged from the service on the 3d of November, at which time the wound had nearly closed, there being but a few granulations at its centre, which followed the motions of the brain. He felt as well as ever, there being no symptoms of cerebral disturbance. The wound had an irregular circular feel, and was situated at the posterior superior portion of the right parietal bone. The treatment consisted in the occasional administration of a purge, and in the cold-water dressing.

CASE II.—Gunshot injury of the skull, with linear fracture and necrosis of bone.—John Boylan, aged 26 years, private, Co. I, 1st Reg. Michigan Volunteers, was struck by a conical ball upon the right side of the vertex, on the 27th of June, 1862, at the battle of Gaines' Hill, which rendered him unconscious for nearly thirty minutes. On regaining his senses he experienced great pain, and discovered that his left arm was completely paralysed and devoid of sensation. It remained in this condition for about one week. Being made a prisoner, he was removed from the field to Richmond, and on the 30th inst. the wound was dressed for the first time. The surgeon found that a portion of the scalp, larger in size than that of a half-dollar, had been carried away by the missile, and that there was a linear fracture of the skull. For three weeks the wound

was dressed with cold water, and having been released on parole, he arrived at the DeCamp General Hospital on the 24th of July.

The wound was discharging very offensive pus, and had cicatrized but little, and the bone was found to be dead. On the 28th inst. a portion of the whole thickness of the skull was removed, exposing the dura mater to the extent of an inch and a half. The ball, in passing over the bone, had scooped out a portion of its substance, leaving a narrow groove about eight lines in length, and had also produced a fissure five lines in extent. The necrosed bone had an elongated, ovoid shape, was one and a half inches in length by three-fourths of an inch in breadth, and was removed from near the superior posterior angle of the right parietal bone.

The patient was discharged from the service on the 21st of October. The wound had completely closed, leaving a depression of nearly three-fourths of an inch; it was very tender, and pressure produced a sensation of lightness and dizziness in the head. No symptoms of brain complication had arisen from the time of the receipt of the injury, but he suffered all along from intermittent headache.

CASE III.—Gunshot injury and contusion of the skull, followed by *neurosis*.—O. C. Spencer, aged 18 years, private, Co. F, 11th Reg. Conn. volunteers, received a blow from a musket ball upon his forehead, by which he was rendered senseless, at the battle of Antietam, Sept. 17, 1862. When reaction took place he endeavored to walk, but staggered, felt very faint, sick at the stomach, dizzy, and was partially blind. These symptoms continued for several days. With the assistance of two comrades he retired to a Field Hospital, where cold water was applied, and he was soon sent to Frederick, and thence to Washington.

He arrived at the DeCamp General Hospital on the 28th of September, when the wound was discharging freely. Simple dressings were employed, but at the expiration of a week erysipelatous action set up, which was readily dissipated by a purge and the local application of tincture of iodine. On the 26th of October, two pieces of the outer table of the vertical plate of the frontal bone, as large as a quarter of a dollar, near its superior border and to the left of the median line, were removed. At times he was so dizzy that he could not walk across the ward, and he suffered from severe neuralgic pains over his eyebrows, extending over the left temple to the vertex. On the 12th of November the wound had entirely healed, but he was occasionally troubled by a recurrence of the neuralgia.

FOLLY ISLAND, S. C., Feb. 4, 1864.

FIVE CASES OF INSPISSATED CERUMEN,

WITH SOME REMARKS ON THE METHODS OF EXAMINING THE EXTERNAL EAR.

By D. B. ST. JOHN ROOSA, M.D.,

ASSISTANT-SURGEON TO THE NEW YORK EYE INFIRMARY.

THE following cases are presented to the profession for the purpose of inducing physicians to examine the external auditory canal, in all those cases where perplexing head-symptoms, such as vertigo and tinnitus aurium, cannot be distinctly referred to any other organ than the ear. They are some that have occurred both in my private and clinical practice during the past six months. They seem to me to add to the testimony in favor of some more convenient means of illuminating the *meatus auditorius externus* than those in common use in America.

The general practitioner, who sees very few ear cases, and who consequently has little experience in their study, requires a method of examination which, while sufficient for ordinary diagnostic purposes, demands very little previous practice in order to its successful employment.

The ordinary method of examining the external ear is by means of direct sunlight, whose rays are directed upon the *membrana tympani* through Albilde's or Toynbee's ear-speculum. The objections to the exclusive use of this means will readily suggest themselves; the chief being

the impossibility of securing sunlight on a large proportion of days, even in consultation rooms especially arranged to secure all the light possible. Another objection is that the unpractised examiner often finds much difficulty in obtaining a good view of the parts to be examined. I have had occasion to notice this lately, and have seen how the student would fail by getting in his own light, turning the patient's head away from the full rays, when, by the means noticed below, he was immediately enabled to see all that was to be seen.

There are a number of contrivances which, by means of a gas flame, oil lamp, etc., illuminate the auditory canal, each having some advantage of its own, but none of them are portable. It is well to remember, in suggesting contrivances for illuminating the ear, that it is not a closed chamber, like the eye, but a single curved canal, into which light is to be thrown.

We have at our disposal a very simple means of illuminating the external ear, which can be used in all kinds of weather, in any consultation room, or at the bedside, by means of ordinary diffused daylight, or with an artificial light. It requires a very limited amount of previous experience to enable the physician to make a sufficient and satisfactory examination of the external auditory canal and the *membrana tympani*.

It, of course, does not supersede sunlight, which, when it is to be obtained, and with a practised aural surgeon, is perhaps the best of all means of illuminating; at least that is the opinion of nearly all the authorities here and abroad.

The method in question is employed by means of a centrally perforated concave glass-mirror, of 6-inch focus, with a handle; and being from 3 to 3½ inches in diameter. With this mirror, and a Toynbee's or Wilde's speculum, with a very limited amount of light, a careful and sufficient examination may be made. The patient sits or stands near a window, or light wall, or, if in the evening, near a light; and, by means of this mirror, the light is thrown into the canal, and on to the drum, the surgeon holding the mirror on the brow as in the use of the ophthalmoscope.

Dr. Hoffmann, of Westphalia, in Germany, probably first suggested this method, although it has been brought into general use by Dr. Von Tröltzsch of Würzburg, who knew nothing of Dr. Hoffmann's previous suggestion.

If those of the profession who don't like to examine the ear, who are incredulous as to its affections, will but use this method they will soon abandon the unscientific diagnosis "deafness," and rescue cases of obstruction of the meatus from the hands of the quacks, who call them *osseous tumors*—and reap a reward in consequence of the neglect of the legitimate members of the profession.

Cases.—I. D. came to my office, on account of a growing deafness, and noise in the ears. Had noticed this state of things for some months; had consulted a physician, who, without examining the ear, told him to drop in some oil; and, as no improvement followed, informed him that he must expect to continue deaf. Hearing distance, with watch whose normal distance is more than four feet—left ear, two inches; right, one; examination showed right canal in a state of sub-acute inflammation, extending to *membrana tympani*; left, obstructed by wads of cotton. Leeches applied about meatus of right ear; and in a few days hearing distance became normal. The left, in which hearing distance remained same, and noise did not diminish, was syringed for some 20 minutes with warm water; and after the cotton and oil were removed, a plug of inspissated cerumen was found, which was removed, and the hearing distance immediately went up to 4 feet, and patient expressed himself as relieved. Has been seen several times since, and continues well.

CASE II.—F. F. H. said that for a year or two he had been troubled more or less with roaring sounds in his ears, and within a short time had caught a cold, which had made him deaf. Hearing distance—right ear, 1½ inches; left, 24 inches. Examination showed plug of blackened cerumen, lying over *membrana tympani* of each side, more dense on left

side. Both masses were removed with warm water. Hearing-distance—left, 8 inches; right, normal. Considerable congestion along handle of the malleus; translucency of drum impaired on left side; ordered leeches applied about meatus; and in a few days membrane returned to a normal condition, and also the hearing-distance; roaring sounds had entirely ceased.

CASE III.—Miss P. four years ago slept near an open window, and awoke with disturbing sounds, referred to the ear, and not hearing distinctly. Had consulted three physicians without obtaining relief. Hearing-distance, with watch, 1½ inches on each side. Examination shows canals filled up, but seemingly *not* with cerumen; a solution of potass bicarb. ordered to be dropped in; and the next day the passages were cleaned by syringing, and plugs of inspissated cerumen removed. Hearing-distance immediately went up to normal point. Patient seen a week afterwards; continued well.

CASE IV.—A machinist has been growing deaf; for some months has consulted a quack, who says it comes from "catarrh." Hearing-distance, each ear, 2 inches. Inspissated cerumen found and removed, as in preceding cases; noises disappeared; hearing became normal.

CASE V.—A coachman came to clinic in eye-infirmary, troubled with vertigo and "nervous difficulty," consequent on exposure to sun during the extreme heat of last summer. Says he heard perfectly well. Hearing-distance, with watch as before, left about 2½; right, normal. Has been treated for two months in one of our city hospitals for head-trouble, with but little benefit. Inspissated cerumen found in left ear and removed. Hearing-distance became normal; and, a week after, said fits of vertigo and roaring noise had not returned.

One might go on for a long time reciting similar cases which are familiar to every one accustomed to treat and examine the ear. The above striking ones are sufficient to illustrate the points here made.

1st.—*The necessity of relying on our own examination, and not on the histories of patients, for an explanation of symptoms.*

2d.—*The need of a simpler means of examining the ear than that generally employed.*

In connexion with these cases, it is well to bear in mind that the ceruminous glands normally secrete, in various persons, according as the common integument is dry or well lubricated, varying amounts of cerumen, and it may be considerable in quantity; but so long as it is of the normal yellowish color, of a soft consistency, and does not press upon the drum, it can cause no unpleasant symptoms.

It is only the firm black mass, which communicates pressure from the membrana tympani to the *ossicula auditus*, and thence to the labyrinth, which causes the vertigo and impairs the hearing power. The somewhat common practice of syringing the ear for every excessive amount of secretion can do no good, and possibly harm. An examination of the canal will at once determine the condition of things, and before this has been had, nothing should be done.

DEATH OF DR. MEAD, OF PUTNAM'S HILL, CONN.—There has dwelt for fifty years at Putnam's Hill, and thence was carried for burial, on the 1st of February, the venerable DARIUS MEAD, M.D., widely known and much beloved in a large circle. Indeed, within the sphere of his extensive practice, it will readily be admitted that none was so worthy to receive that honored title, "The Beloved Physician." He was born in Greenwich, July 9, 1787; fitted under the tuition of his pastor, the revered Isaac Lewis, D.D., for Yale College, which he entered in 1803, and graduated in 1807, at the age of 20. The class numbered such men as Thaddeus Betts, Aristarchus Champion, William Dubose, Thomas S. Grimke, William Jay, Alexander H. Stevens, Jacob Sutherland, and Nathaniel W. Taylor. He studied medicine under Dr. Rush in Philadelphia, received his diploma in 1809, commenced practice in Greenwich in 1810, and there died, Jan. 29, 1864, in the 77th year of his age.

American Medical Times.

SATURDAY, MARCH 19, 1864.

ISOLATION OF INFECTIOUS DISEASES.

BELLEVUE HOSPITAL has demonstrated during the last year the absolute importance of isolating contagious and infectious diseases. Typhus has spread throughout its wards in spite of efforts to quarantine it, and has proved sadly destructive to patients, nurses, and physicians. We are not advised as to the actual number of inmates of the hospital who have contracted the fever from patients admitted with this disease, but it has not been inconsiderable. Of the number of medical attendants who have suffered attacks of typhus from contact with those sick of this fever, while in discharge of their daily duties, we have painful remembrance. In about one year ten of the resident staff contracted the disease, and of this number five, or fifty per cent., died. It is now about half a century since the question presented itself to hospital governors as to the proper disposal of infectious diseases. When persons suffering from such diseases were admitted into the wards of general hospitals it was noticed that "the disease was apt to spread to an alarming degree, so as to require a general dismission of the patients." This was the origin of fever-wards in general hospitals, and finally of fever hospitals. But the mortality in fever-hospitals was found to be very high, due, in a great measure, to their being overcrowded and badly ventilated; and this caused a reaction in favor of mixing the patients in the wards of general hospitals. This plan is still practised in many large hospitals, but it is dangerous, and should no longer be tolerated. Modern science has established these two propositions—that fever cannot safely be introduced into general hospitals, and that fever hospitals may be so constructed as to give a minimum rate of mortality.

DR. MURCHISON, the able physician to the London Fever Hospital, and author of an excellent work on fevers, has recently investigated this subject, and his facts and conclusions are so important that we feel authorized in quoting them at length. It seems that the general hospitals of London still receive fever patients and scatter them throughout the wards, although dire results have followed this practice. They act upon the theory of certain sanitary reformers, who consider contagion a myth, and denounce fever wards and fever hospitals as a crime against humanity, and a disgrace to the age in which we live. The objections urged to isolation are, first, that the concentration of the poison increases the mortality among the patients themselves; and second, that the concentration of the poison increases the danger to the attendants. Dr. M. puts these allegations to the test by comparing the results of the treatment of typhus in the London Fever Hospital with those in six of the principal general hospitals of the metropolis in the year 1862. He says:—

"During the first six months of 1862, 1,107 cases of true typhus were under treatment in the London Fever Hospital, of which number 232 died, or the mortality was 20.95 per cent. In the same period, 343 cases of typhus were under treatment in six of the general Hospitals of London, of which number 80 died, or 23.32 per cent. It may be added that nothing contributes more to a fatal termination in typhus than advanced age, and that the proportion of

aged typhus patients is much larger in the London Fever Hospital than in the other Hospitals of London, because a large proportion of them are the aged and decayed inmates of the metropolitan workhouses, and also that a much larger proportion of them are moribund and beyond all hope at the time of admission; 56 of the 232 cases mentioned above dying within forty-eight hours of their arrival at the Hospital. But leaving these elements out of the calculation, inasmuch as we do not possess the actual figures, on the other side, the bare fact remains that the rate of mortality from typhus was greater in the general hospitals than in the hospital specially devoted to fever. The result, however, is insignificant in comparison to what follows. The 1,080 (1,107-27) cases admitted into the Fever Hospital communicated the disease to 27 persons, of whom 8 died. In other words, only 1 person took the fever for every 40 admitted, and only 1 died for every 135. But the 272 cases admitted into the six general hospitals communicated the disease to 71 persons, of whom 21 died; or 1 person caught the fever for every 3.8 cases admitted, and 1 life was lost for every 12.9 cases admitted.

"The actual data upon which this calculation is founded are as follows:—

Hospitals.	No. of Admissions of Typhus.	Cases contracted in Hospital.	Total.	Deaths.
St. Mary's, January 1 to June 30, 1862	16	1	17	3
St. Bartholomew's " " "	69	23	112	30
St. Thomas's " " "	92	12	104	16
Guy's " " "	40	21	61	21
Mid. Essex, January 1 to Sept. 30, " "	25	6	31	8
German, Dec. 1, 1861, to Feb. 28, " "	10	8	17	2
Total	272	71	343	80

"It is possible that the above comparison may be objected to, on the ground that the time selected was unfavorable to the general hospitals. It is certainly not a common occurrence for typhus to spread in so many of the general hospitals at one time, but this circumstance was due entirely to the unusual prevalence of typhus in all parts of the metropolis. It would not be difficult to cite many instances of an older date, where typhus has spread in general hospitals, even to a greater extent than that indicated above; while, since the comparison was made, the admission of two or three patients suffering from typhus into three general hospitals of London (two of which are not included in the above list), has been followed by an alarming and fatal spread of the disease. Moreover, the time selected was far from being the most favorable to the London Fever Hospital. In the first place, the rate of mortality was considerably above the average; during last year (1863) the rate of mortality among upwards of 1300 cases of true typhus was only 16 per cent., including cases moribund on admission. In the second place, owing to the small prevalence of fever during the years 1858-61, the staff of the hospital had been reduced to a minimum; and on the sudden outbreak of typhus at the beginning of 1862, it was necessary to engage a large number of unseasoned nurses. During the fourteen years immediately preceding the date of the comparison, 3,680 cases of typhus fever were treated in the fever hospital; but the disease was communicated to only 53 persons (nurses and patients), of whom 14 died. In other words, only 1 person caught the fever for every 70 under treatment, and only one died for every 263 under treatment. Moreover, many of the persons who caught fever in the hospital were patients admitted with other diseases, and who were formerly treated in the same wards with the typhus patients; many, in fact, caught typhus in consequence of the principle of isolation not being sufficiently carried out. Since June, 1862, the typhus and scarlet fever patients have been isolated from the other patients, and from one another, and the result has been, that only two or three patients have contracted either of these diseases in the Hospital since the change was made."

It is clearly apparent from these facts that fever may be more successfully treated, and with much less risk to attendants, in well appointed fever hospitals than in general

hospitals. It becomes therefore the most imperative duty of the governing boards of hospitals to provide for the isolation of fever. This isolation they should not only feel impelled to by a sense of obligation to the sick, but a proper regard for those suffering from other diseases. Nurses and medical attendants require that this measure should be adopted. Dr. Muremson has well said: "Is it charity, or is it not rather a barbarous practice, to admit a patient suffering from some trifling disease, such as indigestion or rheumatism, into the wards of a hospital, and to make him, or his friends who visit him, run the risk of contracting typhus or scarlet fever, and perhaps dying of these diseases; and is it right that those charitable members of the community who visit the sick, to minister comfort and consolation, should unknowingly run a similar risk?"

MEDICAL PROVISION FOR RAILROADS.

For several years Dr. ARNOLD, of Yonkers, N. Y., has urged with convincing arguments the necessity of an organized medical surveillance of railroads, to mitigate, as far as possible, the horrors of railroad accidents. At the last meeting of the American Medical Association he brought the subject forward for the endorsement of that body. In some remarks prefacing the resolutions which he offered, he referred to some instances in which medical aid, if promptly at hand, would have saved life. In the fearful accident at Norwalk, by which several gentlemen returning from a meeting of the Association were killed or injured, there was the usual amount of confusion; but occurring as it did near a town where there were several physicians, and where the houses were freely thrown open to the sufferers, the effects of the disaster were greatly mitigated. But the want of some appliances at hand would have rendered the accident far more fatal in its results; every half-hour's delay would have ultimately had its victims. A gentleman travelling on an Eastern road on which a young man had his foot almost cut off by the cars, had the curiosity to note how long it would be before he was put under treatment, and reports that it was six hours. But a few weeks ago the *New York Herald* noticed an accident on the New York Central, by which ten or eleven persons were injured, and where sawdust was the only material to be obtained to stanch the bleeding. Among his recorded cases was that of a lady injured on her bridal tour, and at the inquest a very competent physician testified that he did not consider her wounds mortal, but attributed her death to shock and exhaustion from want of rest, and of earlier treatment. A gentleman who had both his legs broken at the same time was carried to New York; with approaching reaction, he began to suffer pain by the time the cars arrived within four miles of New York, and this increasing every moment soon became perfectly agonizing, so completely exhausting him before he reached the depôt, that it was considered best to carry him into the City Hospital, where he died almost immediately after admission. In another instance a traveller had a leg crushed by the cars, and in being transported to a neighboring city, bled to death on the way, no medical aid being called. Multitudes of such cases occur on the different roads of the country. The evil is of such magnitude that it ought to excite popular inquiry into the methods of mitigation. That the plan of Dr. ARNOLD is feasible no practical mind can doubt; but we have now

positive proof of its utility. This very system has always been rigidly enforced on the French roads, with the best results. A London contemporary makes the following abstract of DR. DE PIETRA SANTA's report:—

"In a recent communication he brings the communication down to the present time, his sources of information being elaborate Government reports, and the reports of the Medical officers attached to the great lines. In respect to these latter, we may observe that the French lines, from the earliest times of their formation, have been placed under organized Medical *surveillance*. The Medical officers, constituting now a numerous and somewhat united body, are charged with the duty of supplying speedy assistance in the case of accidents, with attending to the sick and convalescent among the *employés*, the superintending all hygienic appliances, and forwarding periodical reports to the directors. The general conclusion which M. Pietra Santa arrives at is, that railway travelling, some exceptional cases apart, exerts a highly beneficial influence upon the health; and his investigations do not seem to corroborate the somewhat highly-drawn pictures of the mischief resulting from it which have had some currency amongst ourselves. With respect to accidents, he enters into an examination of the official returns; and from these it appears that between the years 1856-62, the number of travellers amounted to 314,186,161, and among these there occurred 72 deaths and 894 injuries, 55 of the deaths and 280 of the injuries not being the fault of the railway administration. Thus, there was only 1 person killed in 4,363,696, and 1 injured in 351,438 travellers; and by a comparison with the accidents produced by the old diligence travelling, M. Pietra Santa finds that there are fourteen chances to one in favor of making a safe journey in a railway carriage compared to a diligence. The reports of the Medical officers of the various railway lines concur in affirming the superior condition of health enjoyed by the various *employés* as compared with that of persons of their own age elsewhere; and this improvement has been found continually progressing, a fact due, no doubt, to the various hygienic measures which are put into force and insisted upon. The French lines now in operation measure more than 10,000 kilometres."

ALUMNI ASSOCIATION OF THE COLLEGE OF PHYSICIANS AND SURGEONS.

THE annual oration before this Association was delivered on Commencement evening by DR. MAURAN, of R. I. It was well received by a large audience, and elicited frequent applause. On the following evening the annual meeting took place at the residence of DR. JARED LINSLEY; the President, DR. DUBOIS, in the Chair. The reunion was very pleasant. DR. DELAFIELD, in behalf of an alumnus, offered a prize of \$100 for the best medical essay presented during the ensuing year. DR. DRAPER offered a resolution appointing another evening than that on which the Commencement exercises are held for the delivery of the oration. It was also moved that the annual oration be dispensed with, and a prize essay be read in its place. The whole subject of changing the order of proceedings was referred to a committee. It will be a great mistake if the Association dispense with its annual oration. The failure to derive benefit or pleasure from the oration has been heretofore due to the unwise arrangement of assigning to the orator the last half or quarter of an hour of long and tedious ceremonies. An address, however indifferent, will add more to the sociability of the occasion, and answer the purposes of the Association far better than any substitute. DR. JARED LINSLEY was elected President for the ensuing year.

MEDICAL ORATORY.

THE Academy of Medicine does not, like its great prototype of Paris, maintain a very high order of oratorical reputation. In spite of the unwearied efforts of its worthy President to render its sessions highly scientific, its discussions are too generally diffuse and pointless. The fault rests with the members. As a profession, we cultivate far too little the art of speaking. In the Academy of Medicine of Paris, the very highest order of rhetoric is often displayed. In France the members of the medical profession perfect themselves early in public speaking, and hence the vigorous and racy style of discussions in all their societies. Every speaker expresses himself with that ease and elegance which add such a charm both to the oral and written discussion. But a loose and random style of speaking is not the only fault of those who enter the arena of debate in our societies. Not unfrequently language is used by no means befitting a scientific association. Many must have been pained, if not shocked, a few evenings ago, to hear a member of the Academy of Medicine, in open session, characterize an act of the President by an expression altogether unworthy the gentleman who uttered it, and unbecoming the occasion. Such remarks should never be tolerated, even in private, much less in a society which boasts of its purity. No association can ever attain to any very commanding influence which allows its members to indulge in coarse and vulgar language. The Academy of Medicine should never permit such freedom of expression, and the member who persists in degrading himself by such language should not be allowed fellowship in any respectable society.

THE OBITUARY OF DR. CAMMANN.

IN this number we complete the obituary notice of DR. CAMMANN. This graceful and eloquent tribute to the memory of one of our most eminent physicians, is from the pen of DR. J. R. LEAMING, who long enjoyed his familiar acquaintance. To the profession at large DR. CAMMANN was a comparatively unknown man. His singularly retiring habits made him shrink from the publication of his opinions, and even led him to shun the discussion of medical societies. It required the hand of an intimate friend and skilful writer to develop the true character of one really so distinguished. DR. LEAMING has performed a grateful service to a friend, and placed the profession under obligations, by this chaste and timely memoir.

Reviews.

A TREATISE ON PHARMACY; designed as a TEXT-BOOK for the Student, and as a Guide for the Physician and Pharmacist; containing the Official and Unofficial Formulas, and numerous Examples of Extemporaneous Prescriptions. By EDWARD PARRISH, Principal of the School of Practical Pharmacy, etc., Philad., Third Edition, thoroughly revised and improved, with important additions. With two hundred and thirty-eight illustrations. Philad.: Blanchard & Lea, 1864. pp. 850.

PHARMACY, especially American pharmacy, has not at all times received that attention and encouragement from the medical profession which its importance demands. Being of necessity more or less intimately connected with trade, too often have its followers exerted their energies for the purpose of gain rather than the cultivation of science; and too

often have members of the medical profession regarded the pharmacist in the light of a servant, rather than that of a co-worker in the healing art. Thanks, however, to such men as Parrish, Squibb, Procter, Maisch, and other indefatigable workers, American Pharmacy is no longer confined to the level of a mere trade, but has rapidly developed into a noble science, and, by its own inherent merits, is asserting its claim, and assuming its rank among the other learned professions. We are confident that these efforts will be duly appreciated by the medical profession, and already hear the question, not who keeps the most attractive store or the finest variety of fancy articles, but where will our prescriptions be dispensed with the most scientific precision? The conscientious pharmacist will remember that while the eye is pleased with external appearances, genuine merit, though often found clothed in a more unpretending garb, will eventually find its proper level and meet with its just reward.

To obtain a correct idea of the progress recently made in pharmaceutical science, one has only to compare the second edition of Mr. Parrish's book, published in 1859, with the volume now before us. The work is divided into five parts, viz. 1. Preliminary; 2. Galenical Pharmacy; 3. Inorganic Pharmaceutical Chemistry; 4. Pharmacy in its relation to Organic Chemistry; 5. Extemporaneous Pharmacy. Then follows an Appendix, containing some directions on the management of a sick chamber, on the preparation of various articles of diet for the sick and convalescent, and recipes for some of the more important popular medicines; and concludes with a copious index.

In giving a brief analysis of this valuable work, neither our time nor space will allow more than a mere allusion to its most prominent features. Part I. commences with directions concerning the furniture and implements necessary to the dispensing office, followed by some remarks on the U. S. Pharmacopœia, after which the whole subject of weights, measures, and specific gravity is thoroughly discussed. Part II. is devoted to Galenical Pharmacy, and commences with the division of the plant into root, stem, bark, etc., with full directions for their collection and desiccation; the various methods of treating the drug are then minutely described, and, commencing with medicated waters, the working formulas for each class of preparations are given, first those official, then others of acknowledged value, with remarks on their various properties. An interesting feature of the work might here be mentioned, viz. that of syllabi, by means of which the student is enabled at a single glance to learn the most important facts in regard to official preparations. As an illustration of this feature, we will quote the syllabus of the second group of tinctures, consisting of narcotics, sedatives, &c., prepared with strong alcohol, saturated, or nearly so.

OFFICIAL NAME.	PROPORTIONS.	DOSE.	MEDICINAL PROPERTIES.
Tinctura aconiti radicles	$\frac{3}{4}$ vi. to Oj.	gtt. v. to x.	Nervous sedative.
" nuci vomice	$\frac{3}{4}$ iv. to Oj.	gtt. v. to xv.	Nervous stimulant.
" veratri viridis	$\frac{3}{4}$ viii. to Oj.	gtt. v. to xv.	Arterial sedative.
" Cannabis	$\frac{3}{4}$ vi. ext. to Oj.	gtt. v. to xx.	Cerebral stimulant.

The remarks on the different preparations of opium, treatment of poisoning, and the abuse of opium, are worthy of notice.

Part III. devoted to Inorganic Pharmaceutical Chemistry, and Part IV. to Pharmacy in its relations to Organic Chemistry, are well written, comprehensive, and appear fully up to the present standard of chemical science.

Part V. treats of Extemporaneous Pharmacy, and the subject is presented in a manner worthy of the attention of every physician. If the chapter on prescriptions is carefully examined by the practitioner and its directions followed, we believe that fewer mistakes will occur in the dispensing establishment, and physician, pharmacist, and patient, will reap the mutual benefit. Minute directions are here given for dispensing medicines in their various forms; and

this portion of the work is also enriched with a large number of extemporaneous formulas selected from the favorite prescriptions of eminent practitioners. The work is beautifully illustrated, and shows throughout evidences of the untiring industry of its author. We congratulate Mr. Parrish on the result of his labors, and bespeak for his book a wide circulation in the medical as well as the pharmaceutical profession.

Correspondence.

STATE BOARD OF EXAMINERS.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—My attention has been called to the timely communication of Prof. Howard Townsend in the last number of your journal. You are well aware that I have not claimed the credit of "originating the plan" of a "State Board of Examiners" for the degree of Doctor of Medicine; which, although talked about for some years past, never assumed any definite shape until presented to our State Society in the excellent "Report of the Committee of Medical Education," of which Dr. Townsend was chairman, and published in the "Transactions" for 1861. Nor have I ever presented any "plan" whatever, but merely offered in behalf of the Buffalo University a resolution at the late meeting of our State Society, that "a committee be appointed to consider the expediency of, and report a plan for the appointment of a State Board of Examiners for the degree of Doctor of Medicine, at the next meeting of the Society."

Your statement, therefore, that "the project of a Board of Examiners has been revived by the Medical Department of the University of Buffalo," is literally correct; but wrong, so far as you give me any credit for "originating the scheme." This wholly belongs to Professor Townsend. His remarks on this subject, contained in his report, are so just, liberal, and enlightened, that they deserve a far wider circulation than they have yet received. I refer particularly to the following:

"The final examination for the degree should be one of severity, thoroughness, and impartiality, and should only be conducted by a Board of Examiners composed of the most competent and able men, and of those best fitted for the duties who could be selected from our profession; the selection and appointment of the members of the Board being the special privilege of the separate State Societies, or of the American Medical Association, as may hereafter be determined. It should be the duty of this Board of Examiners to meet, say twice in each year, at such parts of the State as they themselves might determine, and then and there summon before them the candidates for examination who have been previously prepared at the different medical schools. This Board of Examiners should be selected and appointed from the profession at large, the medical schools always to be represented in the Board.

"The necessity of using every care in the selection and appointment of the different members of this Board is too obvious to require any comment; indeed the whole success of the plan will depend upon their appropriateness to the office—appropriateness as regards *high moral character, intellectual ability, and general as well as medical attainments and culture.*

"We conceive that some such plan as this, elaborately and consistently carried out in all its details, would contribute greatly towards the elevation of the standard of medical education. It would, in the first place, insure a more thorough preliminary preparation for the study of medicine. Young men would come up to our schools properly prepared to appreciate and profit by the instruction which they would there receive.

"In reference to the instruction of the schools, in order that it should be all that is required of them, we would recommend that the plans which we have hinted at should

be duly developed and carried out in their minutest details. Then the thorough and severe ordeal of the final examination must be insisted upon; must be considered the *sine qua non* of the medical education.

"We deem that these thorough examinations, too, will exercise an equally beneficial influence upon the medical schools themselves—an influence which alone would be worthy of all the efforts required to establish so excellent a censorship; for the necessary result of such examinations would be to encourage greater efforts on the part of the different schools to prepare the candidates which each one may send forth for examination, so thoroughly that failure on the part of those candidates before the Board of Examiners would be the exception to the rule. Whereas, now quite the contrary obtains, the examinations in too many, if not in most instances, being purposely superficial, in order to swell the list of graduates from each particular school. Now the rivalry exhibits itself in the efforts the different schools make to increase the number of graduates; whereas the new arrangement, we consider, would change the rivalry into that of sending the best prepared candidates for graduation, the necessary effect of which latter course will be to incite the most laudable efforts for success on the part both of professors and pupils."—(Report, pp. 198-9. Trans. 1861.)

Such is the plan of the Committee, submitted in 1860. The report was referred to the American Medical Association, but I believe has never been acted on by that body. Copies of it were also directed to be sent to the different State Med. Societies, where it has also, so far as I can learn, met with a similar fate. I am happy to observe that you admit, in common with the great body of the profession, the necessity and importance of a radical change in the present system of examining candidates for the degree of M.D. The fact that hardly one in ten of the graduates of our medical colleges is found qualified to pass the Naval or Military Examining Boards, shows that the present plan is practically a failure, and that the examinations must be extremely superficial. This must necessarily be so as long as the questions are put *vivâ voce*, and each professor examines each student separately and privately. Suppose there are six professorships in a school; if each student is examined before the whole corps of professors, and each is called on to judge in regard to the student's fitness in all the other branches, then the severity of the test would be *as six to one* greater than it is at present. The test would be still more severe, but not too much so, if the questions were *required to be answered in writing*, as before the Army and Naval Boards. Besides, how can we tell, at present, whether the *theses* are written by the students whose names they bear? My experience in teaching, in several medical schools during the last twenty years, has satisfied me that the present system of examination for M.D. is not what it should be. Even where there are censors associated with the professors, the result is about the same. The meshes are not so fine but some mighty blockheads get through the net. Let us weave a finer web.

You ask: "Who shall appoint the Board of Examiners?" I think the Regents of the University are competent to that task, aided, as they might be, by the faculties of the different colleges, or the State Med. Society. What objection can there be to the colleges themselves appointing the Board, either alone or in connexion with the Regents? There are six medical schools in this state. Now let them appoint, each, one Examiner or more, and the Board of Regents six, making a *Board of twelve* in all, from the profession not connected with the schools, to be paid by the State, and *not from the graduation fees*. And let our State laws be so altered as to make it obligatory on all candidates for the degree of Doctor of Medicine to come before this Board for examination, and a diploma issued by them be the only legal license for practice. I see nothing "chimerical" in some such plan as this, but, on the contrary, something entirely practicable, and not difficult to carry into operation.

It may be said that such a plan would drive medical students to other States, where a diploma could be obtained on easier terms. Then let there be a law requiring all physicians who come into this State to practise medicine, to go before this Board for examination for a license, or the degree of M.D., its equivalent, as in Canada, Cuba, etc. This would tend to elevate our profession at once in the eyes of the community, and would do more to root out quackery in all its forms than any or all other measures whatever. You have truly observed, that "the title of M.D. already passes for nothing." In proof of this I may refer you to the fact of the graduation, as a matter of course, of all who attend two courses of medical lectures. If they do not graduate at one school there is no difficulty whatever in getting through at some other. Geneva College, in one year, rejected six students, wholly unfitted by preliminary education or professional acquirement for a degree; all of them were graduated the same year at one of the large city schools. One of our country medical schools was long in the habit of selling its diplomas, sending them by mail to whoever would forward twenty dollars to the dean. In this way, it is said, a favorite quadruped of a notorious wag was dubbed M.D. under the name of John Donkey, Esq. At a late Commencement of one of the largest medical schools in a neighboring city, the professor who addressed the graduates remarked as follows: "Gentlemen, you will make a great mistake if you place any very high value on your diplomas. Formerly the degree of M.D. was considered a high honor; it is so no longer. It is now to be regarded simply as a certificate that its possessor has studied medicine three years, and has attended two full courses of medical lectures. As a token of merit it has no significance whatever." But the diploma has not even the significance claimed for it. For the same school rarely requires any certificates of time, as I know from the acknowledgment of the Dean, nor does it require any evidence, except the possession of the tickets, that the student has ever attended the lectures at all.

But I will not discuss this matter further at present. Indeed, I should have said nothing about it had you not invited me, as it were; and had not a sense of justice towards Dr. Townsend seemed to make it a duty to offer the above explanations.

Yours, etc.,

CHARLES A. LEE, M.D.

PEEKSKILL, March 7, 1864.

Obituary.

DR. CAMMANN.

(Concluded from page 129.)

Thus passed away suddenly, but gently as he had lived, one of the ornaments of our profession. Henceforth his name must be pronounced with those of Bard, of Hosack, and of Francis,—honored and beloved physicians, of whom New York is justly proud.

A post-mortem examination, made on Monday, February 16th, at 1 P.M., by Dr. Peugnet, at which notes were taken by Dr. Leaming, verified substantially the diagnosis previously prepared by himself.

It may be asked, What was the cause of death? And we can only answer: The heart ceased to beat. Why it did not stop before, or why it did not continue to go on for years yet to come, are questions more easily asked than answered. Dr. Cammann has told us that he had for years anticipated what finally took place. In cardiac disease, when sudden death occurs, it is always difficult to say why it should happen at that moment. Here was thickening of the base of the aortic mitral and tricuspid valves, and there was a band extending from the aortic to the mitral valves,—all appearing to have been the result of exudative inflammation and of long standing. Everywhere in this deposit were elevations, and in each elevation

osseous substance was found when cut into. In one of the curtains of the aortic valve, this osseous matter and exudation extended down to the free border and rendered the valve incompetent. The band of pleuritic adhesion, together with the appearance of exudative inflammation in the cavities of the heart, give weight to his opinion that his malady was caused by injury, especially as he never had rheumatism or other inflammatory disease. It is quite certain, that, had not Dr. Cammann regulated his life in the most careful and methodical manner, functional derangements, with greater hypertrophy and probably dilatation, would have taken place at an earlier day. I have no doubt that his life was prolonged many years by the perfect system of living which he had adopted.

He has told us that he had palpitation and oppression when in the recumbent position. Did his lying down that morning determine the act of death? He was in good spirits, and feeling comparatively well when he retired to his bedchamber; in a moment afterwards he called for the windows to be thrown open; the circulation was suddenly obstructed: death commenced at the heart.

Having imperfectly related the principal incidents of the birth, life, and death of our late Fellow, I shall attempt to characterize him in his relationship to society, to the profession, to the Church, and to his family. Circumstances placed Dr. Cammann in a social circle out of which he scarcely ever cared to move. His modesty and knowledge of his disease prevented him from sharing in the gaieties and harmless pleasures of life. He frequented no large assemblies, attended no late dinner-parties, and was not infrequently rallied on these peculiarities. Some of his intimate friends considered them eccentricities, and spoke of them among themselves as subjects of gentle mirth; and he never undeceived them. Since his death these occurrences have come back to their minds with vivid force; and the harmless pleasantries, as they then appeared, seem now, when the circumstances are known, little less than cruelties. He was plain in his dress and unostentatious in all his habits of life; his sole object being to do all the good in his power without drawing attention to himself.

As he loved his profession, he was jealous of its honor; for he believed its great benefits to mankind must come through the regular channel. He despised quackery and set his face against it in every possible way. A young homœopath, who was in the habit of visiting Dr. Cammann's class, and receiving, as all did, instruction and kind attentions, ventured to ask him to see a patient in consultation, stating at the same time that he was a homœopath. "Well, sir," was the reply, "then I cannot meet you." "But," said the homœopath, "see her, and give an opinion to the family, even though not in consultation; for she is very anxious to see you." "No," said the Doctor; "but if she will place herself under the care of a regular practitioner, then I will see her." "But," said the homœopath, "is it not your duty to see her, when by so doing you may save life?" "I will try to prove to you that it is not my duty," said the Doctor. "I believe that the prevalence of your doctrine and practice is a great evil, and by them many lives are lost. Now, if I should go with you to see this young lady, even though not in consultation, I would give you a kind of recognition that may increase your opportunities to do evil. The interests of your individual patient are nothing in comparison with the interests of the community."

His eminence as a physician was not the result of chance. He entered into the study and practice of his profession with his whole soul; and I now claim for him, what he never thought of claiming for himself, that he was a medical genius. By patient toil and earnest thought, he kept himself in advance of the profession. In physical diagnosis, I think he never had a superior. His ear was so delicate, his clinical knowledge so extended, his sterling integrity so prominent a characteristic, that, when he announced an opinion, it was scarcely possible he could be mistaken. He

seemed to have no personal ambition; if knowledge was gained and freely given to the world, he cared not who received the honor. He had an unconquerable aversion to appearing in public, or to writing, and especially to writing a formal treatise. We feel now that this determination was a misfortune, for much of his knowledge that was original and of priceless value is for ever lost for the want of proper record. It was his delight, at his clinic at the Dispensary, to unfold his ideas on particular subjects; and to those gentlemen who attended he intrusted the keeping of those thoughts and conceptions which were the result of careful examination and patient reflection. Many, scattered over different parts of the country, will call to mind their unassuming teacher, and feel that to him they owe in a great degree their power to recognise and control many of the most insidious as well as fatal forms of disease. Through nearly all of his professional life he was a member of but one Society,—that for the Relief of the Widows and Orphans of Medical Men; and of this he was President at the time of his death. During the last year, through the influence of his old and attached friend, our President, he became a member of this Academy, and commenced the preparation of a series of papers on practical subjects, which unfortunately remain unfinished.

He was a consistent Christian; but his religion, like his clarity and his opinions, was never obtruded upon others. Firm and sincere in his convictions, he strove to cultivate good-will to men, and ever found one of his chief sources of happiness in assuaging the sorrows and ministering to the physical wants of the poor and afflicted. He was for many years a vestryman of Trinity Church, New York, and afterwards of St. James's Parish in Fordham.

His relations to his family are too sacred to be the subject of prolonged remark. It is sufficient to say they were of the most happy character. He was a kind and attentive husband, an indulgent father, a warm and sympathetic friend.

His loss is felt wherever he was known, and it will be a long time ere one can be found to fill the place once occupied by our late lamented Fellow.

Army Medical Intelligence.

ORDERS, CHANGES, &c.

Assistant Surgeon C. S. Frink, U.S.V., has arrived at Knoxville, Tenn., and has been assigned to duty at General Hospital No. 1.

Surgeon S. D. Carpenter, U.S.V., has been relieved from duty as Medical Director, District of the Border, Kansas City, Mo., and directed to report to Major-General Curtis for duty.

Surgeon Henry Buckmaster, U.S.V., has arrived at Leavenworth, Kansas, and reported for duty as Medical Director, Department of Kansas.

Surgeon Burkitt Cloak, U.S.V., has been assigned to duty as Medical Director, Chattanooga, Tenn.

Surgeon Adolf Majer, U.S.V., as Medical Director of the expedition to Florida, commanded by General Seymour.

Assistant-Surgeon Rudolf Tausky, U.S.V., to Fort Cummings, N. M.

Surgeon J. H. Grove, U.S.V., to Camp Douglas, Ill., and to the supervision of the Hospitals, Chicago, Ill.

Surgeon James C. Whitehill, U.S.V., as Medical Director, Army of Arkansas, during the absence of Surgeon J. R. Smith, U.S.A.

Assistant-Surgeon C. F. Haynes, U.S.V., to 2d Brigade, Artillery Reserve, Army of the Potomac.

Assistant-Surgeon H. A. Buck, U.S.V., as Superintendent of Hospitals, Springfield, Ill.

Surgeon A. Crispell, U.S.V., to duty in charge of the Medical Department, and as Examining Surgeon of Recruits, Buffalo, N. Y.

Surgeon J. D. Brumley, U.S.V., has been relieved from duty as Superintendent of Hospitals, at Louisville, Ky., and ordered to report to the Medical Director, Department of the Cumberland, at Chattanooga, Tenn.

Surgeon William R. De Witt, U.S.V., has been assigned to duty as Surgeon-in-Chief, 1st Division, 5th Army Corps, Army of the Potomac.

Hospital Steward Rudolph Knapp, U.S.A., to New York city, to report to Medical Inspector Lyman, U.S.A., for duty.

Hospital Steward R. J. Mulhern, U.S.A., to Santa Fé, N. M., to report to Surgeon O. M. Bryan, U.S.V., for duty at Los Pinos, N. M.

Assistant-Surgeon William A. Banks, U.S.V., has reported for duty from sick leave.

Surgeon J. T. Heard, U.S.V., has returned from leave, and resumed his duties as Medical Director, 1st Army Corps, Army of the Potomac.

Surgeon E. Pearce, U.S.V., has been relieved from duty in charge of Branch No. 2, Eruptive Hospital, Louisville, Kentucky, and will report to Cincinnati, Ohio, and report in person to Surgeon John F. Head, U.S.A., Medical Officer of the Board for the Examination of Sick Officers.

Original Lectures.

LECTURES ON GUNSHOT INJURIES OF THE CHEST.

By FRANK H. HAMILTON, M.D.,

PROF. OF MILITARY SURGERY AND FRACTURES AT BELLEVUE HOSP. MED. COLLEGE, AND LONG ISLAND COLLEGE HOSPITAL; SURGEON TO BELLEVUE HOSPITAL; LATE MEDICAL INSPECTOR, U.S.A.

LECTURE IV.—PART I.

It is the general opinion, gentlemen, that when a free opening is made into either of the pleural cavities, the lungs will immediately and completely collapse. It is certain that this will always happen in ease the opening is made after death and no adhesions exist, and the lungs themselves are not congested; but Mr. Guthrie has not found this to occur to anything like the same extent in the living body. This latter observation has been repeated by Williams, Hennen, South, McLeod, Longmore, Ballingall, and Gibson. The lung, under these circumstances, it is said, can be seen in motion and performing its office, although imperfectly, as it does not fill completely the cavity of the pleura.

These gentlemen declare that this is a common experience, even when the lungs are not fettered by adhesions. They do not, however, inform us that in any of their cases autopsies have been made to confirm their statements of the non-existence of adhesions, and it does not appear clearly how the condition of the pleural cavity in this respect could be otherwise ascertained. Their purpose in making these statements is to correct what they regard as a popular error, and to justify the opening of the chest and the free admission of air in certain cases of dyspnoea.

I do not find it difficult to conceive that in case one side of the thorax preserves its integrity, a small portion of air may pass at each act of inspiration into the interior of that lung whose pleural cavity is open. The column of air, entering through the trachea during the expansion of the sound lung, will be divided at the bifurcation of the trachea; and a small portion, in consequence of the momentum it has acquired, will be driven into the lung upon the opposite side; sufficient, perhaps, to cause a sensible motion in the lung of this side, but not sufficient for any useful purpose in the maintenance of life.

I can also understand that if the opening in the pleural cavity is smaller than the opening of the glottis, air will not be admitted, during the act of inspiration, into the pleural cavity as rapidly as into the air cells of the lung, and that consequently the motions of the lung will follow, in some measure, the motions of the ribs; but inasmuch as it is probable that, at each inspiration, more air will enter through the wound than will be discharged in expiration through the same orifice, this coincidence of motion between the lung and the thoracic parietes will soon cease; in other words, the lung will, after a time, collapse.

These are the only explanations of these phenomena which seem to me admissible; and, in either case, we could not expect the maimed organ to be of any particular service, at least for any length of time, in the decarbonization of the blood. Certainly no one will maintain that both pleural cavities could be freely opened where no adhesions existed, and life be prolonged beyond a few seconds, or minutes at most. The few examples of recovery after perforating wounds of both sides of the chest which some of these surgeons have recorded, were, no doubt, examples in which either the wounds were not sufficiently open to admit the air, or the natural cavities were in part obliterated by adhesions.

Mr. Guthrie, whose opinions I have quoted, has not been sufficiently clear upon this point; for, while he admits that opening both cavities simultaneously has proved "almost instantly destructive to life," he affirms that, where an opening is made into the cavity of the chest in the living

body, collapse of the lung does not take place in anything like the same extent as in the dead body; and that, to cause complete collapse of a living lung, its surface must be compressed by a fluid or by confined air.

I will not affirm that Mr. Guthrie is incorrect in his general statement of the facts, but I fully believe that in no case will the lungs, under the circumstances supposed, expand sufficiently to answer any useful purpose; and that, just as certainly as we shall destroy the functions of both lungs when we open freely both pleural cavities simultaneously, just so certainly shall we seriously maim, if we do not actually destroy, the function of one lung, when we open freely its pleural cavity.

We are now prepared to consider the circumstances which may render it necessary to re-open the wound, or to make a new opening at some other point of the thoracic cavity.

First, in certain cases of hæmothorax, the patient, being threatened with suffocation in consequence of the great accumulation of blood within the pleural cavity, will be relieved by the evacuation of the blood and the substitution of air. I say substitution of air, because it is manifest that we cannot evacuate the blood without admitting the air freely at the same moment. Those who have recorded examples of relief afforded by this operation in these cases, have not properly explained its rationale. The explanation which I propose to offer is, that air which is allowed to pass in and out freely through the external opening, can do no more than cause a collapse of one lung; and, indeed, we have seen that this collapse has not been always found to be complete; but blood imprisoned may accumulate until, by its pressure, it causes not only a complete collapse of the lung upon the wounded side, but it may finally displace the mediastinal septum to such a degree as to impair seriously the function of the opposite lung, and even of the heart itself.

We shall be able to determine the existence of hæmothorax by the steadily increasing signs of exhaustion, such as a feeble pulse, extreme pallor, faintness, etc.; by the occurrence of these symptoms during the period when bleeding is most likely to take place, namely, the first few days after the accident; by auscultation and percussion. The blood will usually at first occupy the most depending portions of the cavity, and there will be more or less dullness, with absence of the natural vesicular murmur. If the amount of blood accumulated is excessive, there will be present also a feeling of weight, the patient will be inclined to lie upon the affected side, the intercostal spaces will fill up, the action of the heart will become irregular, and finally all the signs of dyspnoea will supervene. (Sabatier has, however, seen patients die of concealed thoracic hæmorrhage in whom dyspnoea was not present, and the patient could lie upon either side without inconvenience.) If the wound is open, and especially if it is at a depending point, blood may be seen to flow, or clots may project from the orifice.

To these indications of the effusion of blood within the pleural cavity Valentin has added ecchymosis, commencing about ten days after the receipt of the injury or even later, and which presents itself first near the angles of the lower or false ribs and extends downwards into the loins. This ecchymosis is unaccompanied with swelling or tenderness, and is of a bright violet color, being identical in this respect with that which appears on the abdomen some time after death. This phenomenon, however, must not be regarded as absolutely pathognomonic, since it is not always present in hæmothorax, and occasionally the same ecchymosis is observed after wounds which have not entered the cavity of the chest.

Let it be understood, gentlemen, that upon the closure of the wound the surgeon depends very much in these alarming examples of internal hæmorrhage to correct the bleeding, and that nothing but impending suffocation will justify its being reopened. This operation is to be deferred, therefore, to the latest moment; and then, in order to give effectual relief, the opening must be made free, and, in case it is deemed advisable to make a new opening, it will be

well to select the most depending point of the thoracic cavity.

Second.—While it has been found necessary sometimes to open the thorax in threatened suffocation, in order that the blood may be evacuated and air substituted, on the other hand cases have occurred in which air alone, accumulated and imprisoned in the pleural cavity, has threatened death by suffocation, and relief has been afforded by an operation.

This seeming paradox is of easy explanation. It will happen sometimes that the wound through which the air is admitted into the pleural cavity, whether this wound communicates with the bronchial tubes or the outer surface of the chest—it will happen occasionally, I say, that this wound will be so constructed, being oblique or having something of a valvular arrangement, as that the air will be admitted readily, but it will escape with difficulty. There will be an action like that of a force pump; and after a time the air may accumulate to such a degree as not only to compress the lung upon the wounded side, but it may, as in the case of accumulated blood, displace the mediastinal septum and compress the opposite lung.

Relief now will be afforded by an incision which will allow the air to pass in and out with equal freedom.

The signs of pneumothorax are the absence of the respiratory murmur, tympanic resonance, occasionally metallic tinkling, decubitus on the affected side, increase in the circumference of that side of the thorax, elevation of the intercostal spaces, and finally displacement of the heart, compression of the opposite lung, and excessive dyspnoea. In attempting a diagnosis, the surgeon should be careful not to confound a tympanic resonance, due to intestinal and gastric inflation, with that which may be due to the presence of air in the cavity of the pleura.

The operation for the relief of pneumothorax consists in enlarging the original wound, or in making an opening with a trocar and canula at any point which may be most convenient.

Third.—Hydrothorax, as a result of gunshot injuries, may demand the re-establishment of the external opening.

Serum may be effused into the pleural cavities as early as the third or fourth day after the receipt of the injury; and in a few days more the accumulation may be sufficient to occasion serious embarrassment to the respiration. Its presence is recognised by those general signs which indicate the accumulation of any fluid within these cavities, namely, decubitus upon the affected side, enlargement of the circumference of the thorax, projection of the intercostal spaces, absence of respiratory murmur, dulness on percussion, etc.; but it is distinguished from hæmothorax in being preceded usually by the signs of pleuritis or of pleuropneumonia, in the absence of those symptoms of prostration which must necessarily accompany large bleedings, and in the greater facility with which the contained fluid flows from one point of the cavity to another on change of position.

If the original opening has completely closed it will be proper to select a new point for the operation, and one which is sufficiently depending to secure the free evacuation of all the fluid. In general the operator will prefer the upper margin of the seventh rib, at a point near the junction of its posterior and middle-thirds.

The serum found in the pleural cavity under these circumstances is generally more or less mingled with blood; and, if the operation is made as late as the tenth or twelfth day, it may contain both flakes of lymph and pus; but its fluidity is such usually that it will not require a large opening for its evacuation.

BETWEEN 1853 and 1863, 358 amputations were performed at St. Bartholomew's Hospital, London. Of these 93 were primary, 37 secondary, and 228 for disease or malformation. The ratios of mortality were: after primary amputations, 16.1 per cent.; after secondary, 35.1; after amputations for disease, 26.1; after amputation at the upper extremity, 10.8; at the lower, 23.6.

Original Communications.

MEDICO-LEGAL JURISPRUDENCE,

ON A

PRIZE ESSAY OF THE COLUMBIA COLLEGE LAW SCHOOL.

By DR. J. PARIGOT.

It is with great pleasure I read in the last January number of the *American Journal of Insanity* an article on *Mental Unsoundness*, as affecting *Testamentary Capacity*, by Edmund Wetmore, Esq., a member of the Columbia College Law School. It had already been published, but incompletely, in the *American Law Register*. Great benefit may be expected from a mutual scientific intercourse between jurist and physician, aided by the press, especially if they have the laudable aim to settle certain difficult medico-legal points. It is under that impression that I venture to offer some observations on the very interesting paper under consideration.

In medico-legal cases, the first and most absolute necessity is the strict definition of terms. This condition, which alone insures the understanding of all contending parties, being obtained, it is clear that medical and legal definitions could never lead to a different view of an object. In spite of their various relations, social, legal, and scientific, the definition of objects must, as nearly as possible, adhere to nature; and as, in another important point of view, truth, in its concrete form, depends on the advancement of science, we firmly believe that all social and legal applicancies must be changed in the very ratio of our progress in science and civilization. Hence the difficulties about the psychiatric terminology employed in the laws of all countries, since all are more than a century behind the science of that specialty. But that is not all; great care must be taken also by writers on these abstruse subjects, to understand the real sense in which terms are employed in each profession; for it happens sometimes that, by a tacit agreement, wrong terms, or at least some not well defined, are employed by learned and practical men. The very intelligent essayist, in his analysis of some opinions given on *moral insanity* by the Association of the Superintendents of American Asylums in their last meeting in New York, remarks that those gentlemen who admitted the existence of such a disease, argued the possibility of *one* of the mental faculties being altered, and to constitute insanity; also that the same gentlemen pretended there is no reason why the brain may not be disordered in such a way, as to derange *alone* the manifestations of the effective faculties, just as it might derange the intellectual faculties alone, etc. Mr. Wetmore continues further, thus:—"The disbelievers in moral insanity replied that nothing could rightly be called moral insanity, EXCEPT an impulse to do wrong, so uncontrollable by the process of reason—themselves being unimpaired—as to amount to disease." (I ask license to say that such disease might be called *diastrephia*.) Now the Association of American Psychopathists, of which I have the honor to be a member, holds an annual meeting in which any subject may be brought unexpectedly for discussion; every one of us is requested to give, *volens volens*, his opinion; and, for my part, I acknowledge my inability to treat *ex tempore* on each of the immense details and abstruse difficulties of psychiatry. But, taking the fact as it is, we see that even in such a meeting, believers and disbelievers might be considered to agree, since the apparent difference between both is but the affirmation of a fact by one party—fact which the other party considers as an exception. But the discussion on moral insanity was only incidental; perhaps nobody was prepared to follow it to its most remote relations; and if that medico-legal difficulty had been duly analysed, it is possible the assembly might have found it necessary to examine the three following questions:—

1st. Is moral insanity to be understood an *essential* disease, something like an essence without matter, and consequently without visible symptoms?

2d. Can a moral or volitional perversion be the result of a morbid state of the brain, and such disease be either momentary or permanent?

3d. If so, what are the symptoms in both cases?

Perhaps, then, both parties might have agreed that moral insanity, no more than any other mental affection, can exist as a *purely psychical* disease, and that a disease of the brain (idiopathic or sympathetic) might present, besides various bodily symptoms, only one psychical symptom—the impulse to do wrong; in other words, a morbid perversion of affections with cruel instincts. Relating to what has been called *instantaneous* or *transitory insanity*, opinions might have been divided on its existence; crimes might find an easy explanation and impunity if such theory was accepted without care. In our opinion *insane* acts can only be committed by insane people; therefore, without denying the possibility of a sudden irresistible impulse, physical symptoms must give the guarantee that violent passions cannot be turned into insanity.

We wonder that Mr. W. did not himself find out that a pure moral insanity was a nonentity; if there could be such a thing, physicians should certainly not be consulted by courts. And since he says "the Association admitted that manifestations of the emotional faculties, which are the concomitant of insanity, and which, from their peculiar, extravagant, or unnatural character, can only be attributed to disease," why did he not conclude that there is no mental disease, when, at the same time, mental and corporeal symptoms are not discoverable? Insanity is but intelligible as a *relation* of two realities of different nature; true that generally we, psychopaths, take more notice of psychological symptoms, especially those that are so preponderant, that it governs the whole mental condition of patients. I believe it is a fault; we ought always to take the full value of the concomitant signs of a mental derangement.

One important point remains. It is to be regretted that Mr. W. should have been led to believe that the noticeable point in moral insanity was the *character of the act that indicates the existence of insanity*. This is not exactly the case; acts are of a secondary value for such important questions, unless by their *ensemble* they should be the only criterion left by a deceased person to enable one to judge of his anterior sanity. One act alone falls in the rule, *testis unus, testis nullus*; sensible people act often very foolishly, and lunatics sometimes very wisely; there is no doubt, however, that acts are in close connexion with the state of consciousness; but, by themselves alone, without the examination of the perpetrator, they cannot convince any one of insanity. The very example brought forward by Mr. W. shows the truth of this proposition. A similar case to the one related in his memoir happened in Belgium. A man was suspected of insanity for having quietly divested himself of his clothes in a public walk, which at the time was crowded by the *élite* of the place. Sent to the Gheel asylum, it was found that he suffered from no delusion, no pathological symptom whatsoever could be detected; and at last the man confessed that he had committed what everybody judged an *insane act* for the purpose of attaining a comfortable home. But I believe the prize essayist to be convinced, himself, of the insufficiency of one act to establish an insane case, for he says:—"If it is impossible to pronounce any case to be one of insanity *until* the existence of mental alienation is actually proved, then it is possible that an insane man (I suppose the author means a *seemingly one*,) should be held responsible for his acts."

I conclude by saying that moral obliquity by itself is also never a sign of insanity. There are cases in which virtuous men have shown immoral propensities during their insanity; but generally, the former qualities, or defects prior to insanity, follow its victims. I cannot, there-

fore, admit the following inference—that because moral obliquity might be a psychical symptom of insanity, it should constitute a part of a whole being. It cannot be compared to the method employed first by Cuvier, and afterwards by Buekland, Prof. Agassiz, and others, who, with sometimes diminutive and partial remnants of unknown animals, have proceeded to their reconstruction; the conditions of existence constitute *necessary relations of form*, whereas the perversion of our moral nature is not *necessarily* a condition of insanity. Moral obliquity may act as a cause of a pathological condition of the brain, and produce a mental disease. Resuming my propositions, I believe, with the majority of American psychopaths, that *moral insanity* is a term in opposition to the nature of the disease, and conveying a false notion to jurist and physician.

In a future communication I intend to review the remainder of Mr. W.'s paper on *testamentary capacity*.

NITROUS OXIDE, OR "LAUGHING GAS"

AS AN ANÆSTHETIC,

WITH SOME OBSERVATIONS UPON CHLOROFORM AND ETHER FOR THE SAME PURPOSE.

By A. WESTCOTT, M.D., D.D.S.,

OF SYRACUSE, N. Y.

THE great interest which has of late been manifested relative to the nitrous oxide, or "laughing gas," not only by our profession but by the community at large, has led me to feel that some more careful exposition should be made of its properties and effects than I have seen in any medical or dental journal. One would be led to believe, from a host of testimony (if assertions made in advertisements can be regarded as testimony), that this gas is not only harmless under all circumstances and "in every stage of disease," but that its anæsthetic effect is far superior to that of chloroform or ether, and hence it should supersede both of these articles for this purpose. For this conclusion I have seen really no reason given except assertions, and these mainly confined to the advertisements of those who in my judgment are very poorly qualified, either from medical skill or chemical knowledge, to give an opinion, and whose conscientiousness seems to be more deficient than either. No one can deny that even these, sent broadcast as they are throughout the land, do very much towards forming public opinion; and the question arises—Does either the medical or dental profession do itself justice in thus keeping silence, and allowing empirics not only to form public sentiment in regard to such powerful agents, but in fact to control their administration? Certainly neither of these professions should complain of public sentiment in regard to any branch of either profession while the intelligent members of both decline to take any measures to counteract such a state of things. Most of these advertisers can command "editorials," written by themselves, in our public prints by paying for them, and thus have their assertions endorsed by what seems to be respectable authority, till the whole public mind becomes poisoned with what may be the most absurd theories and practices. Nor is their medium of communication confined to *public* journals, as may be seen from the following most remarkable quotation from the N. Y. *Dental Journal*, and which I conclude to be editorial:—"We are under the necessity of believing that the world still progresses, in a dental point of view, by the introduction of nitrous oxide, as dentists are not afraid to take their own anæsthetic. We must confess that chloroform or ether we were unwilling to take ourselves, and never did to insensibility, and never gave it with entire freedom from apprehension. But nitrous oxide we have often taken for our own satisfaction, without the slightest deleterious effects, and the pleasurable sensations we feel are beyond description. *In fact it renders the much needed extraction of teeth a pastime of pleasure and happiness.*"

I have lately seen several articles in different public journals of *this* character upon the nitrous oxide or "laughing gas," and the reasoning in each was essentially thus—"This gas, being composed of the very elements of the air, oxygen and nitrogen, it is of course perfectly harmless, and containing a larger proportion of oxygen than the atmosphere, it is hence not merely more exhilarating, but more healthful." Now these positions, supported by such reasoning, are not merely fallacious but absurd; they imply a most profound ignorance of the laws of chemical affinity, and if these constitute the basis of experiments upon the human system, become as dangerous as absurd. There are few so ignorant as not to understand that the oxygen of the air is absolutely necessary to support life, and also the necessity of its being diluted with nitrogen. Now, while the former would prove *too stimulating* (not exhilarating) if breathed in the pure state, the latter would destroy life still sooner by reason of its possessing no life-supporting quality. But these *mixed* (not chemically combined), as in the atmosphere, in proportion of one of oxygen to three of nitrogen, constitute a medium just fitted for respiration.

The fallacy and absurdity of the reasoning above alluded to comes of blending a mere mixture, where each gas retains its own elemental properties, with a chemical combination where both elements are absorbed in a new compound, differing essentially in all its properties from either element. In any mere mixture we may always calculate with certainty the result on knowing the nature and proportion of each of the constituents. Milk, spirits, or any other article mixed with water does not lose any of its own properties, but is simply diluted. Precisely so is it with the oxygen of the air. It is simply diluted with nitrogen, a gas having, as a simple substance, no active property. But the case stands very different when these elements are combined chemically. By the agency of chemical affinity the most simple elements result in the most acrid compounds; and on the other hand, the most acrid substances form the most harmless and inert compounds. An example of the former we have in the union of oxygen and nitrogen ("simply the elements of the air we breathe") which results in nitric acid, and of the latter in the union of sulphuric acid and lime, resulting in that tasteless and harmless substance, plaster of Paris. To illustrate the *entire antagonism* between a compound and its constituents, we can refer to none more striking than that produced by the union of oxygen and hydrogen; while the former is the great and almost the only supporter of combustion, the latter will not support combustion, but is one of the most inflammable of all substances; the resulting compound of the chemical union of these two gases is *water*, a substance wholly antagonistic in all its properties to both of its elements. Now it would be just as rational for one to contend, while drinking water or breathing its vapor, that he was drinking or breathing oxygen or hydrogen, as to say that he was breathing oxygen when it was chemically combined with any other substance. The universal law of chemistry is, that whenever any two substances are united by chemical affinity, the properties of both are changed, and the result is a third substance differing from either, and that the elements in such compounds cannot act in their individual capacity till a positive decomposition is effected. And hence the perfect absurdity of supposing that we are breathing oxygen simply because we may be inhaling something containing oxygen as a chemical constituent.

These examples might be multiplied *ad infinitum*, but I shall offer but one other, which will not only illustrate remarkable changes wrought by chemical affinity between *different* substances, but where an equally surprising result is obtained by *combining the same substances simply in "different proportions,"* and I can offer no better example than is seen in these very gases—oxygen and nitrogen—in the different proportions in which they are capable of being united. Bearing in mind the nature and properties of

these two gases, as simple substances, or when they are simply *mixed*, as in the atmosphere, let us see what changes are wrought by *chemically* combining them and in different proportions.

These two gases are capable of being combined in five different proportions:

	Proportion.	Result.
1st. Oxygen 1,	Nitrogen 1—	Nitrous Oxide—[laughing gas]
2d. " 2,	" 1—	Nitric Oxide.
3d. " 3,	" 1—	Hypo-nitrous acid.
4th. " 4,	" 1—	Nitrous Acid.
5th. " 5,	" 1—	Nitric Acid—[aqua fortis.]

It is not necessary to describe the peculiar qualities of all of these compounds. It is sufficient to say that while one proportion of oxygen and one of nitrogen, *chemically combined*, form the exhilarating or Laughing Gas, two proportions of oxygen, with the same amount of nitrogen, form the Nitric Oxide gas, a single inspiration of which would destroy life almost instantly. And *five proportions of oxygen* with one proportion of nitrogen, constitute Nitric Acid, or aqua fortis—a substance not tolerated by any part of the human system for a single moment.

But if the theory above alluded to be correct, viz. "The more oxygen a compound contains the more healthful and exhilarating it becomes," and *this is the one sought to be impressed upon the public mind*, then nitric acid, containing five times the relative amount of oxygen that nitrous oxide does, should be five times as healthful and exhilarating as the latter gas!

The upshot of this whole matter is simply this: no man, however good a chemist he may be, can predict the nature of a compound by any study of its elements, much less its effect upon the human system. This is to be done, and only to be done, by actual experiment. The chemist who first discovered that the combination of one equivalent of each of the two gases, oxygen and nitrogen, constitutes the exhilarating gas, was of course entirely familiar with the nature and properties of both of its constituents, and yet he was doubtless not a little surprised to find the resulting compound was of such a character, nor could his surprise have been less when he found that simply by doubling the amount of oxygen the resulting compound was of a most deadly character as regards its effects upon the human system. There are now three substances in use as anæsthetic agents, viz. sulphuric ether, chloroform, and nitrous oxide—the chemical composition of each of which is as follows:

Nitrous oxide is composed of—Nitrogen 1 proportion, oxygen 1 proportion.

Sulphuric ether—Carbon 4 proportions, hydrogen 5 proportions, oxygen 1 proportion.

Chloroform—Carbon 2 proportions, hydrogen 1 proportion, chlorine 3 proportions.

From the above it will be seen that inasmuch as the effect of each of these upon the human system is essentially the same, no judgment can be based upon their composition as to their nature in this relation. While the nitrous oxide is one-half oxygen, ether contains but one-tenth, and chloroform not one particle of oxygen. The question now naturally arises what is the effect of the nitrous oxide as shown by actual experiment? I answer in general terms by comparison.

It is essentially the same as that produced by chloroform or ether, with at least two drawbacks against it, which I shall hereafter point out. The first effect of any and of all of these agents is to produce great and rapid excitement throughout the whole system—the blood-vessels are enlarged, and the blood circulates with nearly or quite double its usual rapidity. When this exhilarating stage has reached its height, a stupor gradually supervenes, and the pulse correspondingly lessens, till frequently it becomes frightfully slow and weak. Now it is very easy to account for this rapid exhilaration. A stimulant taken into the *stomach* as ardent spirits, has to pass through the ordinary channels of digestion before it reaches the brain, but this, being ab-

sorbed by the blood, as it passes through the lungs, is taken almost instantly to the brain. But as to how it produces its anæsthetic effects, or entire insensibility to pain, is a question far more difficult of solution. There are two theories upon this point; the one accounts for the phenomenon by supposing that the extraordinary amount of blood carried to the brain produces actual compression upon this organ, and that the effect is the same as if the skull were actually depressed, which always produces insensibility.

PROF. SIMPSON, of Edinburgh, who first introduced chloroform into surgical and dental practice, accounts for this result by ascribing it to its peculiar effect upon the nervous system. He contends that those nerves which control motion are first affected by it, those of sensation next, and that it may, under peculiar circumstances, reach and paralyse the vital nerves, in which case instant death must ensue. But it matters very little which theory we adopt, either in regard to its anæsthetic or fatal effects, as the *modus operandi* in producing them is essentially the same in each of the three; and as a legitimate conclusion, it follows that if there is in any given case any good reason why ether or chloroform should not be used, there must be a still stronger one for avoiding the nitrous oxide gas. Neither of them if pure is, strictly speaking, poisonous, yet each of them will destroy life. My own view of these articles is this: that *any* agent capable of producing so unnatural a state, in so short a time, must necessarily thoroughly test the soundness of all who have this test applied, and if they have any physical ailments or defects, it will be quite sure to find them. It hardly need be added, that the employment of such agents should be confined to those thoroughly skilled in medical science, and, at that, used with the utmost caution. In regard to the comparative effect of these three substances respectively, my conviction is, that while the nitrous oxide is by far the most exhilarating, its anæsthetic effects are greatly inferior to either of the others.

(To be Continued.)

ON THE VALUE OF LOCAL TREATMENT IN CHRONIC DIARRHŒA AND DYSENTERY.

By HENRY M. LYMAN, M.D.,

OF CHICAGO, ILLINOIS.

WHILE waiting, yesterday, for a train at a railway station near this city, my attention was attracted to the history of his experience with which a lieutenant of the 7th Kansas Cavalry Regiment was entertaining an acquaintance. This officer was a tall, robust man in the prime of life, in perfect health, at home on furlough with his regiment which had lately re-enlisted in the veteran corps. For more than two years he had been in active service, *jay-hawking* in the wildest regions of the south-west. It was a life he enjoyed, so full of excitement and activity. He had served as a volunteer through the war with Mexico, when a very young man, and had passed through all the risks of those perilous campaigns, without wound or sickness of any kind, till the arrival of his regiment in New Orleans at the close of the war. He was there attacked with diarrhœa, which remained unchecked, and soon became chronic—the regular *camp dysentery*. Treatment seemed to produce no effect; several physicians abandoned the case in despair; and after several months had gone by, death seemed imminent. From about one hundred and sixty pounds, his weight had fallen to ninety pounds, and emaciation was still progressing. One day, however, as he was brooding over his sufferings and wretched condition, he became impressed with the idea that if he “could be thoroughly greased inside,” he would get well. He at once procured a quantity of castor oil, and swallowed a tumblerful. No purgative effect was produced by this draught, only a portion of the oil was voided unchanged the next morning. This application, for it was nothing else, afforded great relief, and was repeated every day. Recovery commenced immediately, and in a few weeks’ time was complete, and has never been followed by any return of the disease.

My own observations, while on duty in the hospitals at Nashville, taught me the great value of castor oil in the great majority of cases of chronic disease of the intestines. One case, a hospital orderly, who was with me five months after his recovery, had suffered four months with a diarrhœa which had reduced his flesh “nearly one-half,” he said. A few doses of castor oil and laudanum relieved him completely, and he experienced no further trouble while under my observation. In the management of these cases in hospital practice, much depends upon the nurse. In most of the wards I found dysentery and diarrhœa very intractable, but I had one nurse whose patients nearly all recovered. When castor oil was ordered in his ward, it was taken; and when an injection was prescribed, it was always administered, no matter how great the reluctance of the patient to submit to an operation which our western soldiers seemed to dread more than the loss of blood. The treatment which we found most successful consisted in perfect rest, total abstinence from water, counter-irritant applications to the abdomen, cholagogues *pro re nata*, castor oil combined with laudanum. When there was much pain and frequent ejections, when the colon was diseased, starch enemata, containing oxide of zinc, and morphia or belladonna, were used. When there was pain in the sigmoid flexure, attended with purulent discharges, we derived great benefit from the use of tr. iodin. co., dissolved with a small portion of extract of belladonna in glycerine, and carried to the seat of disease through a long, flexible injecting pipe. In this way an officer, attached to the staff of Maj.-Gen. Rosecrans, was cured of ulceration of the sigmoid flexure. His military zeal, however, carried him too soon again into active service; and after a few months of exposure and fatigue, the disease was revived, and will probably continue to harass its victim, so long as his restless energy continues to interfere with that perfect repose without which all medication is useless. More fortunate was another of the officers of the same staff, who came home, from the war in Mexico, I think, with a chronic dysentery, which resisted all the usual forms of treatment, and was rapidly destroying him. With characteristic decision this gentleman at length made up his mind that “this thing must be stopped;” so, having purchased a syringe and a quantity of excellent brandy, he shut himself up at home and proceeded to fill his colon with the undiluted liquor every night and morning. At the end of three weeks he was well, and has been well ever since. This may seem like heroic treatment; it was certainly endured with heroic fortitude, for the pain attending each injection was terrific; “it was like throwing liquid fire into the bowels.”

CHICAGO, Ill., Feb. 23, 1864.

COLLODIUM FOR THE STING OF WASPS.—DR. MUNDE gives the following:—About a week ago, on removing the cover of a warm-water reservoir, in the loft of one of my houses, I was stung by a wasp in the first joint of my right index, a little below the nail. The pain was intense, and inflammation set in immediately. Before I reached my office the joint had swollen considerably. Instinctively—I might almost say so, though I thought of the action of the ether—I seized a vial with collodium, and covered the injured place all over, when, to my surprise, the pain left immediately, the swelling subsided, and a minute after I had no other unusual feeling in the joint than that of the contraction caused by the drying collodium. When after two or three days the latter had been removed, I could see the dark spot where the sting had entered, but did not discover the sting, which had not been left in the wound. I do not know whether my accidental discovery is new, but I thought if it were unknown, it was interesting enough to be communicated.

M. HOMOLLE has found the following powder efficacious in two cases where obstinate constipation had raised the question of operation for artificial anus:—Powdered strychnine, $\frac{3}{4}$ th gr.; powdered nux vomica, $\frac{1}{4}$ th gr.; calcined magnesia, 6 grs.—Mix. One powder a day at first, then two and finally three per diem.—*Lancet*.

Progress of Medical Science.

ACUPRESSURE.

DR. SIMPSON, in one of his clinical lectures, draws the following comparison between the ligature and acupressure:—

THE LIGATURE.

1. Requires isolation, and consequently some detachment of the end of the vessel.

2. Produces laceration of the two internal coats of the artery.

3. Produces strangulation of the external coat.

4. Leads on to ulceration or molecular destruction of the external coat of the constricted part.

5. Causes mortification of the artery at the tied point, and usually also below it.

6. Produces, consequently, a dead, decomposing slough of each part ligatured.

7. If organic, it imbibes animal fluids, which speedily decompose and irritate.

8. Requires to produce the highest stages of inflammation at each ligatured end, viz. ulceration, suppuration, and mortification.

9. Is not removable except by the slow ulceration and sloughing of the ligatured vessel, which requires a period of from four or five to twenty days and more.

10. Generally requires two persons for its application.

11. Is sometimes followed by secondary hæmorrhage, as an effect of ulceration and sloughing.

12. Sometimes fails altogether in cases of recurring secondary hæmorrhage.

13. Sometimes cannot be applied till the surgeon first exposes the bleeding vessels by the knife.

14. Prevents, as a foreign body, adhesion by first intention along its track as long as it remains.

15. Stops only the artery tied.

16. Stops only one artery.

17. Is not unfrequently followed by surgical fever, from leading to the formation, and allowing absorption of septic matters.

ACUPRESSURE.

Requires none.

Produces none.

Produces none.

Produces none.

Produces none.

Produces none.

Requires only metallic needles or threads, which are incapable of imbibing animal fluids.

Requires to produce inflammation up to the stage of adhesion only.

Is removable in an hour, a day, etc., at the will of the operator.

Requires only one person.

Is seldom followed by this form of secondary hæmorrhage, as there is no ulceration or sloughing.

Has succeeded under such circumstances where the ligature has failed.

Does not necessarily require the exposure of the vessel, and, therefore, has sometimes prevented the necessity of using the knife.

Is early withdrawn, and is hence far less opposed to primary union.

Stops generally both artery and vein.

May close two or more smaller arteries, by means of a single needle.

Is much less likely to be followed by surgical fever, because it does not lead to the formation of septic matter, and closes the veins as well as arteries.

18. For these various reasons, primary union rare, healing slow, and septic or surgical fever not uncommon.

Primary union more frequent, healing quicker, and septic or surgical fever less common.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, NOV. 11, 1864.

DR. D. S. CONANT, PRESIDENT, IN THE CHAIR.

(Concluded from page 126.)

DR. BAUER'S SPECIMEN.

DR. CONANT was disposed to think that the case was not one of fracture, inasmuch as the bodies of two or three of the vertebræ were absorbed, and that there was no attempt at ankylosis at the end of a period of three years. Then again there should be a paralysis of the lower extremities immediately following the accident.

DR. BAUER contended that the bodies of the vertebræ were not destroyed, and argued that the non-union was caused by long-continued irritation. As evidence of the traumatic origin of the lesion he instanced the fact, that the application of an apparatus was attended with instant relief.

DR. CONANT remarked that the application of an apparatus in cases dependent upon constitutional disease was also followed by such a result.

DR. PARKER was also disinclined to the idea of fracture having existed at all, as there were no data for founding such an opinion.

INTERESTING CASE OF RENAL DISEASE.

DR. ELLIOT presented a pair of kidneys taken from a multipara, who entered Bellevue Hospital on the Thursday before. At the time of her admission she was in her eighth month of pregnancy with her sixth child. She never had trouble with previous confinements. She was exceedingly drowsy, and answered questions very unsatisfactorily. As the result of persistent questioning, it was ascertained that she had suffered from dizziness during a previous pregnancy, and that a few years ago she had been subject to a puffiness about the face and hands in the morning. The pulse was 100, and quite feeble. The left pupil was somewhat dilated, and contracted sluggishly under the influence of light, as compared with the other. On the Sunday before, while rising from the breakfast table, she became suddenly paralysed on her left side; sensibility of the side was very defective; tickling of the foot, however, produced the customary jactitation. The urine presented a moderate amount of albumen, and had a specific gravity of .1020, and was normal in color. Examined microscopically by Dr. Francis Delafield, it showed no evidences of casts, but there was a considerable amount of blood present. The urine dribbled from her, the bladder not being distended, and the secretion was caught by a cup placed between the thighs. The os was dilated to the size of half a dollar, but not dilatable. The foetal head could be detected within the os, presenting in the first position, the summum of intensity of the foetal heart was upon the left side.

On the suspicion that the case might be one of uræmia, and threatening convulsions, the necessity for inducing premature labor was seriously thought of. A saline cathartic was administered on Thursday with the effect of brightening her intellect on the day following. There was, however, still a good deal of jactitation present, though this condition was not persistent. On Saturday she was so much improved that it was decided to defer the induction of the premature labor, in hopes that the case was not so serious a one as was first supposed. It was then thought that the bloody urine might be due to simple congestion of

the kidney, and in that view Dr. Mola was directed to apply wet cups to the lumbar region, and in case she bore the remedy well, to apply them also to the back of the neck. Dr. Mola came to the conclusion very properly, after the first application of cups, not to repeat them. The patient passed the night as usual, and in the morning, by the help of the attendant, was able to sit up in bed. Shortly after she lay down, and without any warning the liquor amnii escaped, followed by the child, and when the nurse, who was only a few feet distant from her, came to the bed, she found the child, placenta and all, between the thighs of the patient. Some clots followed; firm pressure was made upon the uterus; and Dr. Mola being sent for, arrived immediately. Dr. Mola found the uterus well contracted, and immediately resorted to the best possible means to guard against hæmorrhage. When Dr. Elliot saw the case in the course of the day, she was breathing automatically, and died soon after.

Autopsy.—The head being examined, there was an undue amount of sub-arachnoid fluid. The arachnoid membrane was opalescent. The two lateral ventricles also contained an abnormal amount of fluid. The choroid plexus was pale. About the fissure of Sylvius there was evident softening of the brain substance. There were slight adhesions in the chest, and there was also fluid in the pericardium. The right kidney, weighing about four ounces, contained a cavity occupied by a whey-like fluid, while the walls of this cavity were extremely thin, reducing the organ almost to the condition of a multilocular cyst. The ureter leading from the kidney was also filled with the same material, and was increased in calibre. This tube being cut off a short distance below, was not followed further. In one of the pouches of the kidney was found a small renal calculus. Dr. Elliot's theory was, that a calculus had at one time escaped from the kidney and become arrested at its entrance into the bladder, causing thereby dilatation of the ureter and pelvis of the kidney, and lastly, by the accumulation of the matter causing absorption of the substance of the gland. The other kidney weighed seven ounces and was perfectly healthy, being abundantly able, to all appearance, to perform the excretory function allotted to it.

Dr. Elliot ascribed the presence of albumen in the urine to the muco-purulent fluid found in the ureter and pelvis of the right kidney. He was of the belief that the patient would have recovered, had she not been at the time of parturition in such an anæmic state that she was unable to bear the loss of the usual amount of blood. He could not explain the head symptoms or paralysis in any other way, save upon the supposition that the tissue remaining in the right and existing in the left kidney was not sufficient to excrete the necessary amount of urea. The tissue of both kidneys was in a perfectly healthy state.

Dr. Post presented the stump of the limb of a man that had been wounded through the ankle at the battle of Gettysburgh. The leg was amputated midway between the ankle and knee. Dr. Post saw the case a short time since, and found the leg flexed at nearly a right angle, and the tibia in a state of necrosis. Under the circumstance he concluded that it was best to re-amputate the leg at the place of election, which he did. The posterior tibial nerve was found gangliform and expanded at the extremity of the stump as usual. The sequestrum extended from the free extremity of the stump to the point of amputation. A portion of the healthy compact tissue was removed to show the position of the necrosis in the substance of the shaft.

Dr. MARKOE remarked, that the sequestrum was not a tubular one, as is found often in the os brachii and femur, due to the division of the nutrient artery of the bone.

CYANOSIS FROM MALFORMATION OF THE LEFT VENTRICLE.

Dr. LEWIS SMITH presented a heart removed from an infant 38 hours old. On the 21st of October he was called to a woman in confinement with her second child. The labor terminated favorably. The child was resuscitated without difficulty; its cries were strong, and its color was natural.

Thirty-six hours after, Dr. Smith was called to see the child, which was livid, gasping for breath, the respirations being sixty per minute, and the pulse 140. He learned that shortly after his first visit, the child began to breathe irregularly, and that finally the symptoms of suffocation fairly declared themselves. The little one died three hours afterwards.

At the autopsy the lungs were found solid throughout, except at their anterior margin, a remarkable circumstance, inasmuch as the child cried during most of the night before. The right side of the heart was normal, the ductus arteriosus was large, and contained none of the fibrinous clots which close the artery. On the left side of the heart was found an interesting malformation; in the place of the ventricle was a small cavity lined by a dense fibrinous substance, and that covered by the endocardium. There were no columnæ carneæ nor chordæ tendinæ. The cavity would only hold 25 minims. The aorta is also very small.

The Society then adjourned.

American Medical Times.

SATURDAY, MARCH 26, 1864.

RECIPROCITY OF MEDICAL SERVICES BETWEEN BELLIGERENTS.

At the very commencement of our great national struggle we advocated the establishment of such a regulation or understanding between the contending armies as would secure the entire exemption of the medical officers, hospitals, and medical stores from seizure, or even from interference. The first battle of Bull Run disclosed the horrors of a battle-field where the sacred mission of our profession is disregarded, and where the surgeon is treated as a combatant. A few heroic surgeons resolved to sacrifice all in behalf of the wounded, and remained courageously at their posts during the terrible panic, laboring to mitigate the sufferings of those who had fallen. In the midst of their humane efforts they were seized as prisoners, conveyed to headquarters, and compelled to give their parole before they could return to their duty. In some cases several days elapsed before the surgeon was permitted to resume his care of the wounded. In all cases their instruments, medicines, and medical stores were seized and appropriated. When the wounded had all been cared for, the Federal surgeons were sent to Richmond, where they remained several months before they were allowed to return home. Several died in prison, and their memories should ever be held in grateful remembrance.

The first proposition to open negotiations with the rebel authorities for the purpose of securing a reciprocity of medical and surgical services was made previous to this battle, at the Surgical Section of the Academy of Medicine, at the suggestion, we believe, of Dr. HENRY S. HEWIT, of this city, formerly a distinguished member of the medical staff of the Regular Army, and now the senior surgeon of the volunteer staff. Holding most enlightened opinions of the mission of the medical staff as the conservator of human life, in whatever position or condition it is found in peril, Dr. HEWIT has labored zealously and strenuously to further this most humane object. At one period he obtained consent of the Commanding General to visit the enemy under a flag of truce, and arrange the details of a reciprocity of

medical service, but he was recalled before he reached the rebel lines.

The proposition has never been received with that favor which its importance deserves by our own general officers. They have constantly manifested either great indifference or a fear of yielding what was not due, or of being overreached in the arrangement. But that such a negotiation is possible, and that its results may be most satisfactory, we have historical evidence. Among the interesting developments made by the Committee of the International Conference, assembled at Geneva, to examine the means of supplying the deficiencies of the sanitary departments of armies in the field, is that relating to the reciprocity of medical services. A London contemporary makes the following extract from the report:—"During the war of the Austrian succession, Marshal de Noailles, commander-in-chief of the French army, concluded an arrangement at Aschaffenburg with Lord Stair, commander-in-chief of the English army, by which they engaged to regard hospitals as sanctuaries, and to protect them mutually. This engagement was strictly fulfilled during the war. On the 6th of February, 1759, a similar engagement was concluded in Flanders between General Conway for the King of Great Britain and the Marquis de Barrail for the King of France. The treaty concluded between the King of France and Frederick the Great of Prussia on the 7th of September, 1759, contains a clause by which the contracting parties bind themselves to take care of the wounded, to provide them with food and medicine, that their physicians and servants shall be permitted to attend them with a passport from their general, and that all wounded shall be sent home either by land or water, as may best suit them, with the sole condition that the wounded prisoners shall not serve until they have been exchanged; also that the sick in hospital shall not be made prisoners, but when recovered shall be sent home by the shortest road. The same rule applied to commissaries, chaplains, physicians and surgeons, apothecaries, and hospital attendants. General Moreau, commander-in-chief of the French army in the year 1800, prepared a similar treaty, and proposed it to General Kray, commander of the Austrian army, who refused to accede to it."

Although our own authorities have never moved actively in this matter, there has still been that sense of the necessity of a just regard for the services of the medical staff, that surgeons have generally not been detained very long by either party. There has, however, been little or no regard paid to surgical instruments, medical stores, etc., and the consequence is that a vast amount of needless suffering has followed every battle. This is a subject which should still be agitated by the medical profession persistently, until the needed relief is obtained.

NEW YORK COUNTY MEDICAL SOCIETY ON HEALTH REFORM. THE NEW YORK COUNTY MEDICAL SOCIETY stands as a living monument of the power of the medical profession in the Government of the State half a century ago. It was organized by statute law, with powers and privileges which gave it the control of the practice of physic in the county. The State, to an almost unlimited extent, constituted it the guardian of the health of the people, inasmuch as it was made the final arbiter in all questions affecting the purity and efficiency of the medical profession. No one can think it strange, therefore, that those who are interested in

health reform should submit to this Society their plans, and ask its candid judgment and friendly counsel. Accordingly at the last meeting of that Society a Health Bill, drafted by DR. WILLARD PARKER, DR. JAMES R. WOOD, DR. JAMES ANDERSON, F. S. WINSTON, Esq., and other gentlemen of respectability, was presented for its consideration and indorsement. Will it be believed that this once powerful and influential Society placed itself in the leading strings of an employé of the City Inspector, listened with childlike credulity to his statements of the extraordinary healthfulness of New York, and accepted without a dissenting voice his sage advice to lay the Health Bill on the table, as it was a political measure, and so respectable a Society should not "meddle with politics." The New York County Medical Society has, after years of lifeless inactivity, recently shown signs of returning animation; but in this action it gave unmistakable evidence of imbecility. No other medical organization would have listened for a moment to the specious statements of an agent of that sink of political, social, and official corruption, the City Inspector's Department. How infinitely more consistent is the course of the Kings County Medical Society, which annually renews its youth, and not only maintains a high scientific reputation, but enters heartily into those great reforms designed to improve the social and physical condition of the people. That Society early recognised the importance of health improvement, and has cordially indorsed and actively aided the measures from time to time brought forward, and has thus nobly fulfilled the mission which the State imposed. We commend to the New York County Medical Society the example of its sister Society, and also the following advice of the Father of American Medicine, DR. RUSH:—"Permit me to recommend to you a regard to all the interests of your country. It was in Rome, where medicine was practised only by slaves, that physicians were condemned by their profession, '*mutam exercere artem.*' But in modern times and in free governments they should disdain an ignoble silence upon public subjects."

POPULAR USE OF NITROUS OXIDE.

WE call the attention of our readers to the article on the Use of Nitrous Oxide, from the pen of DR. A. WESTCOTT, of Syracuse, a gentleman of large experience, and one who evidently understands his subject. The efforts on the part of a few interested individuals to bring the "laughing gas" into common use for anæsthetic purposes, has already provoked some discussion in the Medical and Dental Journals; and the fact that two deaths have recently occurred through its employment, has disposed both the medical and dental professions to hesitate before lending their sanction to the support of a practice of so questionable, not to say dangerous a nature. When told that "laughing gas" differs from the common air we breathe only in containing an additional portion of the life-supporting principle, it is not strange that the popular sentiment should be enlisted in its favor. This is especially the case with those who recognise no difference between a mere mechanical mixture and a chemical combination. To this portion of the subject DR. WESTCOTT has done full justice. Aside from the two deaths reported, facts are not wanted to prove that inhalation of nitrous oxide, so far from being harmless, is positively dangerous. DR. A. C. CASTLE, of this city, reports three such cases in a recent number of the *Boston Medical*

and *Surgical Journal*, as coming under his immediate notice. In connexion with this subject we would beg leave to enter our solemn protest against the too common practice of anæsthesia for the simple and instantaneous operation of extracting a single tooth. Every physician has seen some evil effects from this practice, whether the agent be æther, chloroform, nitrous oxide, or any of the various humbugs that have from time to time appeared in the shape of mesmerism, frozen gums, etc. Confine anæsthesia to the more serious operations, and let the agent be administered under proper restrictions, and it will truly prove a boon to the human race.

HEALTH-OFFICER OF THE PORT OF NEW YORK.¹

On the 19th inst. Gov. SEYMOUR nominated to the Senate Dr. JOHN SWINBURNE, of Albany, for Health-Officer in place of Dr. GUNN, and the Senate immediately confirmed the appointment. Thus has closed the long contest to supplant Dr. GUNN, who has held his position during half the term of the present administration, though politically obnoxious to the Governor. The inability to remove Dr. G. was owing to a change in the law two or three years ago, which prevented the Governor from removing the Health-Officer except during the session of the Legislature. But the Senate being strongly Republican, it would heretofore have rejected any Democratic nominee of the Governor. The whole matter was finally "fixed up" between the two factions, and in a moment Dr. GUNN was removed and Dr. SWINBURNE installed. Dr. GUNN has, we believe, administered the affairs of that office to the satisfaction of the merchants of the city, and retires, we hope, with a fortune acquired from its emoluments. Dr. SWINBURNE brings to the office a high reputation for executive ability. We are glad to see this most important position at length filled by a man eminent in our profession.

A FEMALE MEDICAL COLLEGE.

THE Legislature of the State of New York has passed an act authorizing the New York Infirmary for Women to confer the degree of M.D. This Institution, which is under the charge of MISS BLACKWELL, a regular graduate and a regular practitioner, must not be confounded with that *mélange* of quackery known as the Female Medical College. The New York Infirmary is a well conducted institution, and has thus far done nothing in education except to train nurses. It is now the purpose to do more, and organize a systematic course of medical instruction, as in other medical colleges, and give diplomas when their education is completed. The course of instruction will be the same as in other colleges. The faculty is not yet chosen, but it is designed to select the lecturers from the best class in the profession. This school will be thoroughly regular in every respect, and it will be the effort, we learn, of the trustees to render the school worthy of the confidence of the profession.

A MISAPPROPRIATION OF PUBLIC FUNDS.

THE prosecution in the Court-Martial upon Surgeon-General HAMMOND has recently closed without establishing one of the charges set forth in the indictment against him. It is to be regretted that a quarter of a million of the public money should have been thus expended in a vain attempt to blast the reputation of an officer whose administration of one of the most important Government Bureaux has challenged the admiration of the medical profession of this and foreign countries.

Correspondence.

HIGHER RANK OF ARMY MEDICAL OFFICERS.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR—I have observed in a recent number of the *MEDICAL TIMES* an excellent article in relation to the prominent and important position which the medical profession, both in and out of the army, now hold in the estimation of the country. If we consider what the medical officers of the army have accomplished in the way of preserving the health of the troops, thus maintaining their efficiency, and keeping the percentage of sickness so small, notwithstanding the influence of climate and exposure, it must, I think, be acknowledged that they possess some claims upon the gratitude of the country.

If we take, for example, the position of the Medical Director of the Army of the Potomac, which, in my opinion, is next in importance to the General Commanding, we find him with the rank of Major only. It cannot be denied that the Army of the Potomac owes as much, if not more, to the Medical Director for its efficiency than to all other causes. The sanitary measures carried into effect by him, and the admirable arrangements made by him for the sick and wounded, have made it what it is.

I have endeavored, in various reports made, to have accorded to Medical Directors a rank commensurate with the importance of their duties, so as to enable them to have a voice in the Council of War, before all important movements of an army are made. They are the best judges of the capabilities of the men, and the character of the marches and endurance required of them, compatible with their efficiency when their fighting qualities are wanted.

As a general thing, if permitted, they would bring to a Council of War large and varied experience and knowledge, valuable to all concerned.

My object in writing to you is to suggest, that if you could devise some plan by which your able articles on the claims of medical officers could be seen by the members of the two Houses at Washington, they might serve a good purpose; otherwise, I presume, they will never be seen by them.

Yours, etc.,
SURGEON, U.S.A.

CINCINNATI, O., Feb. 29, 1864.

VENTILATION OF IRON-CLADS.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR—Allow me to communicate an idea in regard to ventilation of iron-clads. I think the same plan of ventilation that would suit a house would answer for the iron-clads; the rooms are to be considered the same as the decks, and the principle carried out will give sufficient ventilation. First, your openings for entrance of fresh air must be from the spar deck (or upper deck) by cylinders leading down to the hold, with branches leading to the decks (should there be more than one, such as main or gun-decks), one, two, three, or four on each side of upper decks, to allow the fresh air to enter from above; and then a central tube perforated to reach to within a foot or two of the upper deck for the exit of the foul air, or the air when exhausted of its vitality. Now, to obtain the constant current, the central tube should have above the perforations (between them and the upper deck) one or two chambers where a small stove, or fire, or any contrivance is placed to rarefy the air above and create a vacuum or draught; this rarefaction, constantly going on, draws continually through the tubes, for the admission of fresh air, a current of sufficient velocity to keep a sufficient supply for the crew of the boat; of course, the greater the rarefaction the larger the amount of draught.

S.

TREATMENT OF SMALL-POX.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR—In connexion with the experiments and report on the use of *Sarcæna Purpurea* in variola, lately published in the MEDICAL TIMES, I would call your attention to a statement, that a great discovery is reported to have been recently made by a surgeon of the English army in China, in the way of an effectual cure of small-pox. The mode of treatment is as follows:—When the preceding fever is at its height, and just before the eruption appears, the chest is rubbed with croton oil and tart. emetic ointment. This causes the whole of the eruption to appear on that part of the body, to the relief of the rest. It also secures a full and complete eruption, and thus prevents the disease from attacking the internal organs. This is said to be now the established mode of treatment in the English army in China, by general orders, and is regarded as a perfect cure. Will not Dr. Levings subject this also to the ordeal?

Yours, etc.,

DANIEL LORD, M.D.

HENDESON COTTAGE,
Feb. 23, 1864.

TREATMENT OF DIARRHŒA.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR—On the account of ill health, engendered from climate, exposure, and hard toil, I was compelled to retire from the service. My resignation was accepted at New Orleans some four weeks ago. As your most valuable and highly instructive "MEDICAL TIMES" is more thoroughly circulated in the Army than any paper of the kind, I will give, for the benefit of your readers, and especially army surgeons, the following prescription for all forms of diarrhœa: R Spts. nit. dulc. 2 oz.; tinct. opii 1 oz.; strychnine 1 grain; mix.

From 30 to 40 drops four times a day. The marked tendency to *asthenia* in all army diseases, and especially diarrhœa, led me to use this prescription, the use of which was followed with the most happy results.

In fact I had but little trouble with diarrhœa. A majority of the cases yielded in 48 hours.

Yours, etc.,

C. W. DAVIS, M.D.

Late Surgeon 34th Iowa.

INDIANOLA, IOWA.

PHILADELPHIA.

Special Correspondence.

AFTER a long silence, I resume my pen in the fond hope of appearing before your readers as a favored contributor to your columns. Our colleges are just making their last efforts at sending forth to the terrified world a host of *embryo* doctors, licensed "to kill, burn, and destroy." From all sources of information, I am led to the belief that there has been an unexpected looking up in the line of students, and consequently we may infer a corresponding increase in the number of the graduates. The various lecturers have certainly worked as hard as ever, and the classes appeared more industrious than usual in their efforts to acquire a knowledge of the "healing art." At present, we are blessed with but two colleges—the Jefferson and the University, though there is an extra number of eclectics, *et id genus omne*. The latter, by the way, it would seem, flourish rather on account of the war, as in many instances an eclectic is preferred to a "regular;" perhaps being willing to "bleed" more freely for an appointment.

Our medical societies are all in a highly flourishing condition, their meetings being held monthly and bi-monthly, and well attended, the subjects before them thoroughly and freely discussed, and every member showing an anxiety for knowledge. We hope it may continue, as

there is vast room for improvement. The venerable College of Physicians has at last a home, having built an edifice at the N.E. corner of 13th and Locust streets, which is fire-proof, of pressed brick, and eminently uncouth in its outward appearance. The rooms are large and well appointed, though a radical, and it would appear irremediable, error is felt in the presence of an echo, which destroys all pleasure in listening to a lecture or discussion. This is caused by a succession of small arches extending across the room, improving the appearance, but injuring the room for its principal purpose. On several occasions, I have found it impossible to keep the thread of the discussion, and I am satisfied that the majority present were in a similar condition, and inwardly groaned at the builders of the colleges. I believe the "Mütter Museum" is being rapidly placed in position for study, and, when completed, the Fellows may feel proud of their position as a Medical Association. Recently, this society have become more liberal in adding to their membership, and are rapidly increasing their numbers, thus obtaining an infusion of new and younger material, which cannot fail to have a good effect upon the Association. Should they carry out all their suggestions, they will become a valuable adjunct in medical education, particularly the education of graduates, many of whom have regarded a diploma as finishing their course of study, and have remained content with their little *modicum* of knowledge.

For some months considerable excitement has been caused in our community, both medical and otherwise, by what is familiarly called "spotted fever." Last fall a number of deaths occurred in the north-western part of our city, known as Manayunk; the disease seems to have spread generally throughout the city, and is now met with in all quarters. Nor is it confined to the city, as cases have reached us from Chicago and other parts of the West; in fact, it is an epidemic prevailing almost throughout the entire North. What is it? Its symptoms are severe but adynamic fever, sharp and continued pain in the head, specially complained of at the occiput and nape of the neck, great tendency to coma early in the disease, followed often by convulsions or opisthotonos, the head burrowing back in the pillow, sometimes the whole spine arched back like a bow, the bowels irregular, great loss of power, particularly in the nervous system, and death rapidly supervening. The tetanic convulsions and other symptoms cause many to regard it as the same disease which some years ago prevailed to a limited extent in the West, and was denominated "epidemic tetanus." The profession is by no means a unit relative to its nature. Some think it a blood disease, others cerebrospinal meningitis, etc. Its vulgar name is derived from the eruption over the whole body of numerous purplish spots, varying in size from that of a small pin's head to several inches in circumference. During its free discussion at our societies, I have drawn the inference that those are most successful who stimulate early and freely. Too often, time is not allowed for the institution of any treatment. In this connexion I might remark, that there appears at present an epidemic influence predisposing to adynamic affections, and particularly of the nervous system. Small-pox, which at one time was expected to be very prevalent during the winter, in consequence of the coming home of so many of our furloughed men from Washington, and other places where it was rife, has been kept at bay, perhaps, by the very careful vaccination which has been performed by our physicians, through fear of its approach. We cannot attribute it to our clean streets, as Philadelphia never was filthier, or looked more slovenly. A new inspector having been appointed, we hope for better things, but *may* be disappointed.

March 2, 1864.

Army Medical Intelligence.

MEETING OF MEMBERS OF THE MEDICAL STAFF OF THE DEPARTMENT OF THE OHIO, KNOXVILLE, TENN.

(Special Correspondence.)

SIR—At the request of the Medical Director of the Department of the Ohio, members of the Medical Staff in and about this city assembled at Masonic Hall, at 7 o'clock P.M., on the 13th ult. Surgeon L. D. GRISWOLD, of the 103d Regt. O.V.I., was called to the Chair, and DANIEL P. BAYNTON, Asst. Surg., 104th O.V.I., was requested to act as Secretary.

Surgeon HEWIT then being called upon, stated that the object he had in view in appointing the meeting was to elicit from the Staff an expression of opinion in regard to the policy of organizing a Military Medical Association, the chief aim of which should be the elevation of science and the maintenance of the dignity and honor of the medical profession. After stating in a clear and concise manner the advantages which in his belief would accrue from such an organization, he concluded by expressing the hope that he might hear from other gentlemen present upon the subject.

L. D. GRISWOLD, Surg., 103d O.V.I., EDWARD SHIPPEN, U.S.V. Post Med. Dir., J. G. HATCHET, U.S.V., Med. Dir., 23d A.C. and other gentlemen, followed, all heartily endorsing the views of Surgeon Hewit.

On motion of Surgeon HATCHET a Committee was appointed, with instructions to draft a Constitution under which to form a permanent organization, and report at a future meeting.

There being no further business, the meeting adjourned to meet again at 7 o'clock P.M., Wednesday, the 17th ult.

Wednesday, 17th Feb., 1864.

The meeting of the Medical Staff assembled this evening, pursuant to adjournment, and was called to order by the Chairman. The minutes of the last meeting were then read and adopted. The report of the Committee being next in order, the following Constitution was read, and submitted by the Chairman of the Committee:—

CONSTITUTION.

We, the undersigned Medical Officers of the army, on duty in this place and Department, hereby associate ourselves into a Medical and Surgical Society, under the following constitution and by-laws, and pledge ourselves, each according to his ability, to promote and carry out the interests and objects of this association.

1st. This Society shall be called the Tripler Military Medical Society, in honor of Surgeon Chas. S. Tripler, of the U.S. Army.

2d. Its object shall be mutual improvement in scientific attainments; the collection and preservation of facts, and comparison of experience with reference to their bearing on professional duty in the field and hospital; the advancement of the honor and interests of the profession; contributing to the historical records of the war, and enriching the National Museum of Pathology.

3d. Its officers shall be a President, Secretary, and Executive Committee, consisting of three.

The President and Secretary shall be chosen by ballot. The Executive Committee shall be appointed by the President. The President shall be chosen from the surgeons of hospitals or regiments. The Secretary shall be an Asst. Surgeon or Acting Asst. Surgeon. The term of office shall be three months.

4th. The duty of the Executive Committee shall be, to prepare and present subjects of discussion, and to propose by-laws and amendments to by-laws. The President may call a special meeting whenever it may be his pleasure, by and with consent of two of the Executive Committee.

One Asst. Surgeon or Acting Asst. Surgeon, at least, shall always be a member of this Committee. It shall also be arbiter in all questions of ethics.

5th. The ethics of this Society shall be the ethics of the American Medical Association.

6th. All medical officers of the army, and contract physicians serving in the Department, are members of this Society. All physicians of the community, and those engaged in a semi-official capacity, are freely eligible as honorary members, and are respectfully invited to attend the scientific meetings. Hospital stewards, who are bona fide students of medicine, are invited to be present at the meetings, but will be expected to retire at the commencement of the executive session.

7th. The Medical Director may at any time request the President to adjourn the meeting for the purpose of calling an official meeting of the staff for military purposes.

8th. The records and papers of this Society shall be carefully preserved by the Secretary, handed over to his successor, and on its expiration become the property of the Surgeon-General's office. The weekly report of the meeting shall be sent to the AMERICAN MEDICAL TIMES for publication. This Constitution and By-Laws shall be published in two medical periodicals—one Western and one Eastern.

9th. The medical officers of the different army corps in the department, when separated from the headquarters of the department, are recommended to form sub-societies in correspondence with this body, and to forward their records for incorporation and final transmissal to the Medical Bureau of the army. Meetings shall be weekly, or more frequently, as the Society may direct. All official papers received from Headquarters of the army, Surgeon-General and Assistant Surgeon-General, affecting the common duty and interests, will be read at each meeting.

On motion of Surgeon Ashman, of the 93d O.V.I., in charge of General Hospital No. 2, the Constitution was accepted and adopted by sections.

On motion of Surgeon Wolff, Acting Assistant-Surgeon, U.S.A., the Constitution and Preamble were then adopted as a whole, and the Committee discharged.

The names of the following gentlemen were then enrolled as members of the Society:—

Geo. W. McMillen, Surgeon 5th East Tennessee Inf.; L. D. Griswold Surgeon 103d O.V.I.; G. P. Ashman, Surgeon 93d O.V.I.; Alfred Nash, Surgeon 5th Michigan Vol. Cav.; John Wright, Surgeon 107th Ill. Vol. Inf.; John Mills, Surgeon 6th East Tenn. Inf.; P. H. Bailhach, Surgeon 14th Ill. Vol. Cav.; C. W. McMillen, Surgeon 1st East Tenn. Inf.; Geo. A. Collamore, Surgeon 100th Ohio Vol. Inf.; Hamilton E. Smith, Surgeon 27th Mich. Vol. Inf.; Edward Shippen, Surgeon U.S.V. and Post Med. Dir.; Jas. G. Hatchet, Surgeon U.S.V. and Med. Dir. 23d Army Corps; A. M. Wilder, Surgeon U.S.V.; A. J. Phelps, Surgeon U.S.V.; A. L. Carrick, Surgeon 2d Tenn. Cav.; Henry L. U. Burritt, Asst.-Surg. U.S.V.; David Maskay, Asst.-Surg. 79th N. Y. Vol. Inf.; M. N. Moss, Asst.-Surg. 24th Ky. Vol. Inf.; R. McGowan, Asst.-Surg. U.S.V.; W. R. Welmon, Asst.-Surg. 80th Ind. Vol. Inf.; S. Wolff, Act. Asst.-Surg. U.S.A.; S. Darling, Jr., Asst.-Surg. U.S.A.; Ralph W. Cummings, Asst.-Surg. 2d Mich. Vol. Inf.; S. E. Sheldon, Asst.-Surg. 104th O.V.I.; C. S. Frink, Asst.-Surg. U.S.V.; H. S. Hewit, Surg. U.S.V. and Med. Dir. of the Department; Daniel T. Boynton, Asst.-Surgeon 104th O.V.I.; John J. Wilkins, Asst.-Surg. 14th Ill. Vol. Cav.; G. A. Wilson, Asst.-Surg. 14th Ill. Cav.; M. L. Lich, Asst.-Surg. 9th Mich. Vol. Cav.; Wm. W. Wythers, Asst.-Surg. U.S.V.; W. McMillan, Asst.-Surg. 9th Ohio Vol. Cav.; Edwin Freeman, Asst.-Surg. U.S.V.; C. M. Chalfaut, Asst.-Surg. 11th O.V.I.; A. J. Larey, Asst.-Surg. 2d East Tenn. Inf.

The election of officers resulted as follows, viz:

L. D. GRISWOLD, Surgeon 103d O.V.I., President.

DANIEL T. BOYNTON, Assistant-Surgeon 104th O.V.I., Secretary.

The President then briefly addressed the Society, thanking the gentlemen for the high honor they had been pleased to confer upon him. And while he felt that a more competent person might have been selected, yet he yielded to none in point of professional zeal, and in the earnestness of his desire to promote the interests and carry out the aims of the Association.

The appointing of the Executive Committee being next in order, at the request of the President, it was agreed that he have until the next meeting to make the selections.

On motion of Surgeon Hewit, the President was in-

structed to request the Secretary to address a letter to Surgeon Charles S. Tripler, informing him that he has been made an honorary member of the Society.

There being as yet no Executive Committee, the President was requested to announce some subject for discussion at the next meeting. Exsection, Resection, or Excision, was the subject proposed, and Surgeon Shippen was invited to open the discussion.

After the reading of official papers from Headquarters of the Army, and conversation upon various topics pertaining to the Medical Department, on motion of Surgeon Ashman, 93d O.V.I., Saturday evening was fixed upon as the time for the weekly meetings of the Society, and the meeting adjourned to meet again Saturday at seven o'clock P.M.

L. D. GRISWOLD, President.

DANIEL T. BOYNTON, Secretary.

ORDERS, CHANGES, &c.

Assistant-Surgeon E. Freeman, U.S.V., is waiting orders at Cincinnati, Ohio.

The following named Hospital Stewards of the Regular Army, recommended for promotion, will present themselves for examination before the Board of Officers ordered to convene in this city, March 10, 1864:—Joseph Leonard, Michael O'Brien, William Logan, Edward Harris, and C. Steelhammer.

Surgeon G. L. Sutton, U.S.V., has been assigned to charge of the Annapolis Hospital, Rendezvous of Distribution, Alexandria, Va.

Surgeon F. G. Snelling, U.S.V., has resumed charge of the Chesapeake Hospital, Fort Monroe, Va.

Surgeon Josiah Curtis, U.S.V., has been ordered to Knoxville, Tenn., for duty in the field.

Surgeon E. P. Richardson, Mo. St. Mil., has been appointed Medical Director, District of Central Missouri, Warrensburg, Mo.

Surgeon Charles O'Leary, U.S.V., has been relieved from the charge of Christian Street Hospital, Philadelphia, Pa.

Assistant-Surgeon Franklin Grube, U.S.V., has been assigned to the charge of the Marine General Hospital, Cincinnati, Ohio.

Hospital Steward James M. Cadogan, U.S.A., is dishonorably discharged the service of the United States for utter worthlessness.

Upon the report of the Board instituted by Special Field Orders No. 29, January 29, 1864, from Headquarters Department of the Cumberland, and upon the recommendation of the Commanding General of that Department, Private James T. Adair, 46th Pennsylvania Vols., is honorably discharged the service of the United States, with a view to his employment as Act. Assistant-Surgeon U.S.A.

Surgeon Sanford B. Hunt, U.S.V., is relieved from duty at the Rendezvous of Distribution, near Alexandria, Va., and will proceed without delay to Louisville, Ky., and report in person to Assistant Surgeon-General R. C. Wood, U.S.A., for assignment to duty.

Surgeon George L. Sutton, U.S.V., as soon as the Board of which he is a member, convened at Convalescent Camp, Va., now Rendezvous of Distribution, near Alexandria, Va., has concluded his labors, will report in person to Surgeon R. O. Abbott, U.S.A., Medical Director, at Washington, D.C., for assignment to duty.

Surgeon Charles O'Leary, U.S.V., now at Philadelphia, Pa., will report by letter to the Provost Marshal-General, U.S.A., for duty as member of a Board to be convened in that city, for the examination of applicants for commissions and commissioned Officers already in the U.S. Invalid Corps.

Colonel Edgar M. Gregory, 91st Pennsylvania Vols., is assigned to the command of Chester Hospital, Chester, Penn., so long as it may be used as a point of Rendezvous for Veteran Volunteers.

Medical News.

TWELFTH ANNUAL COMMENCEMENT OF THE N. Y. OPHTHALMIC SCHOOL.—A few evenings since the twelfth Annual Commencement of this institution was held at the chapel of the N. Y. University. The lecture room was crowded with ladies and gentlemen. The Rev. Dr. Anderson opened the proceedings with prayer. S. Jenks, H.M., made the introductory remarks. Dr. Garrish read the names of the following graduates:—

C. D. Woodruff; J. H. Dodson, M.D.; Anber Martin, M.D.; A. E. Carries; W. C. Osterloh, M.D.; Dr. C. M. Wight, U.S.A.; Geo. Palmer; W. W. Gardiner, M.D.; G. V. Rendig; J. Dennison; L. W. Burns; J. W. Long; D. Brekes, A.B.; J. F. Nagle; J. L. Morrill; G. G. Needham, A.B.; J. Sprigg Underwood, M.D.; E. B. Miller, M.D.; J. H. Harris; W. F. P. Smith; D. A. Haddon, M.D.

The following students passed the best examination:—J. Sprigg Underwood, M.D.; David Brekes, A.B.; G. G. Needham, A.B.

Dr. Marcus P. Stephenson, one of the attending surgeons, who was next introduced, made an elaborate address on the importance of the study of Ophthalmic Medicine and Surgery. Mr. G. G. Needham, A.B., made the valedictory address.

At a special meeting of the Binghamton Academy of Medicine, held on the evening of the seventh inst., the following resolutions were unanimously adopted:

Whereas, It has pleased Almighty God to remove by death our late and much esteemed professional associate, Dr. Pelatiah Brooks, a consistent and valuable member of this Academy, therefore, in token of the sincere respect and appreciation in which we hold his memory, we do hereby adopt the following resolutions:

Resolved, That we are called upon to mourn the loss of one whose talents, zeal, and industry we have much admired, and who, had life and health been spared him, promised to stand in the foremost rank of the profession of his choice.

Resolved, That in the death of our beloved brother we have been deprived of an intimate and much valued friend, and that we shall ever love to remember the endearing qualities of truth, manhood, and gentleness which blended to form his character.

Resolved, That we tender our warmest sympathy to the bereaved family of the deceased.

Resolved, That as a public testimonial of regard and a tribute of respect for the memory of our departed friend, we will attend his funeral in a body, and wear the usual badge of mourning on the occasion.

Resolved, That a copy of these resolutions be transmitted to the afflicted family; and also that they be inserted in the papers of this place, and of the AMERICAN MEDICAL TIMES.

J. G. ORTON, Secretary.

W. S. GRISWOLD, Pres't.

COLLEGE OF PHYSICIANS AND SURGEONS. Commencement, March, 1864.—Graduates.—The following gentlemen took their degrees as Doctors of Medicine:

Samson American, N. Y.; Theophilus H. Andress, N. J.; Philip H. Barton, Ind.; John Sterling Bird, Conn.; John Bedell Boss, N. Y.; Richard B. Brown, A.B., N. H.; Geo. J. Bucknall, A.B., N. Y.; Francis P. Casey, N. Y.; Samuel F. Chapin, Mass.; Albert T. Chapman, Conn.; A. Thomas Cuzner, N. Y.; Henry A. Danker, N. Y.; Charles E. Darby, Nova Scotia; Albert A. Davis, Vt.; Charles De Cokerille, N. Y.; Francis Delafield, N. Y.; Samuel Demarest, Jr., N. Y.; Henry J. Devlin, N. Y.; Geo. Clinton Dewey, A.M., Mass.; Dwight Dudley, N. Y.; George H. Dunbar, Mass.; Francis D. Edgerton, A.B., M.D., Conn.; John Elderkin, A.M., N. Y.; George M. Engs, A.B., R. I.; D. Darwin Everett, N. Y.; Edward Farrell, Nova Scotia; Arebelaus G. Field, M.D., Iowa; John H. Furman, N. J.; Arthur McIntyre Gregory, N. J.; David L. Haight, A.M., N. Y.; John C. Holmes, N. J.; John C. Hooper, Nova Scotia; Geo. W. Hosmer, N. Y.; Edward G. Janeway, A.M., N. J.; Joseph E. Janvrin, N. H.; Wm. H. Kinney, Penn.; Henry M. Knowles, Mass.; Wm. B. Linsly, N. Y.; Wm. M. McKay, Nova Scotia; James W. McLane, A.B., Y. Y.; Daniel E. McSweeney, A.M., N. Y.; David Magie, Jr., A.M., N. Y.; Geo. J. Northrop, Me.; George B. Oakes, Nova Scotia; John P. Pemberton, A.M., N. Y.; Charles L. Pierce, N. H.; Stephen C. Powell, N. Y.; Alfred Pryor, Nova Scotia; Allen S. Russell, N. Y.; Thos. T. Sabine, A.B., N. Y.; John P. Schenck, Jr., N. Y.; Wm. F. Scoresby, N. Y.; Charles E. Simmons, A.B., N. Y.; Montross L. Smith, N. Y.; Wm. R. Stillwell, N. Y.; Freeman Stoddard, Conn.; George W. Stout, N. J.; Edward W. Thompson, N. Y.; Wm. Thurman, A.B., N. Y.; Elbert P. Tibbals, Conn.; John L. Todd, N. J.; Platon Vallejo, Cal.; Augustus Van Cortlandt, N. Y.; Fred. D. Vanderhoof, N. Y.; Samuel D. Wadsworth, A.B., N. Y.; Wm. P. Warner, Mass.; Lathrop P. Weaver, Conn.; DeWitt Webb, N. Y.; George G. Wheelock, A.B., N. Y.; J. Elias Whitehead, A.M., N. Y.; Thomas Wight, N. Y.; Wm. S. Willis, N. J.

The prizes were as follows:

1st Thesis Prize (\$50) for a thesis on The Treatment of Aneurism, involving the Subclavian in such a Part of its Course that a Proximal Ligature is only applicable within the Scalenii, by Thomas T. Sabine, A.B., of New York. This thesis contained abundant and valuable statistics of the different operations, with accurate drawings of the affected parts.

2d Thesis Prize (\$25) for a Thesis on the Urine, by Platon Vallejo, of California. This thesis was accompanied by a series of over 60 elegant preparations and specimens of calculi, deposits, and crystals, with colored drawings to correspond.

Honorable mention of the thesis On the Sense of Vision, by John H. Furman, of New Jersey; On Excision of the Knee-Joint, by Geo. G. Wheelock, A.B., of New York; On Small-Pox, by Geo. H. Dunbar, of Massachusetts.

Harsen Prizes for Clinical Reports of Practice at the New York Hospital. First Prize, Harsen Medal and \$150, to James W. McLane, A.B., of New York. Second Prize, Harsen Medal and \$75, to David Magie, Jr., A.M., of New York.

Stevens Prize, \$100, for Anatomical Preparations of the Larynx, to Samuel F. Chapin, of Massachusetts, for a series of preparations illustrating the human and comparative anatomy of the larynx and some of its morbid alterations.

The Valedictorian of the Graduating Class was Jas. W. McLane, A.B., of New York, and the Orator of the Alumni, Joseph Mauran, M.D., of Providence, R. I.

Original Lectures.

LECTURES ON GUNSHOT INJURIES OF THE CHEST.

By FRANK H. HAMILTON, M.D.,

PROF. OF MILITARY SURGERY AND FRACTURES AT BELLEVUE HOSP. MED. COLLEGE, AND LONG ISLAND COLLEGE HOSPITAL; SURGEON TO BELLEVUE HOSPITAL; LATE MEDICAL INSPECTOR, U.S.A.

LECTURE IV.—PART II.

It is desirable, if possible, to prevent the admission of air in all cases in which we operate for hydrothorax.

Military surgeons do not all assent to this doctrine. Some have observed that air does not directly influence serous surfaces, and they can see no harm in allowing it free ingress; but air certainly promotes decomposition of blood, pus, and probably of serum also, and converts them from bland, unirritating fluids into ichorous and scalding discharges. When blood, serum, or pus is present, therefore, it would be fortunate if the air could be excluded. We have seen that this cannot be done when we operate for hæmothorax, since a small opening would be insufficient to evacuate those large clots of blood. In traumatic hydrothorax, however, the fluid may in general be evacuated by a trocar and canula, and with judicious management the admission of air can, in many cases at least, be prevented.

There is another reason why we would avoid the admission of air after this operation. We resort to tapping in hydrothorax not alone for the purpose of relieving the dyspnœa, nor, indeed, mainly for this purpose; but in order that we may, by a timely removal of the pressure upon the lung, prevent the formation of those adhesions which will very soon bind it against the posterior wall of the thoracic cavity, and impair, if it does not destroy, its function for ever. In short, we remove the fluid in order that the lung may resume at once its normal position, and in the hope that by contracting adhesions over the whole of its peripheral surface, we may effectually secure the patient against any similar accumulations hereafter.

Having removed the fluid as completely as possible, and closed the wound hermetically, if you please, the patient should be directed to lie upon the injured side, so that the lung shall be made to fall, if possible, against that side of the chest; by which means adhesions between the pleura-costalis and pleura-pulmonalis will be favored.

Fourth.—The chest must be opened when pus has formed within the cavity of the pleura. The signs of empyema (pyo-thorax would have been a better term) are the common signs which indicate the presence of any fluid in this cavity, occurring in most cases at a later day than in either hæmothorax or hydrothorax, preceded by pleuritis or pleuropneumonia, accompanied with rigors, night sweats, and all the usual phenomena of hectic; the intercostal spaces are more frequently obliterated, and the cellular tissue of the dorsal and lumbar regions is sometimes cedematous.

The existence of empyema having been fully ascertained, no time ought to be lost in giving to the pus a thorough evacuation, either at the wound, or, in case this is completely closed, at the most depending point of the thoracic cavity.

What has been said in relation to the admission of air in cases of pneumo-thorax, is equally applicable to the pathological condition we are now considering. Air rapidly decomposes the pus and renders it offensive, acrid, and irritating; and by the admission of air, also, the lung is not permitted to expand upon the removal of the pus; and permanent disability of the lung, with contraction of the thoracic wall, is inevitable.

In idiopathic empyema, employing the term idiopathic in contradistinction to traumatic, and in examples of traumatic empyema, the result of incised or punctured wounds—in none of which cases is there probably any foreign substance, such as pieces of clothing, fragments of

bone or of bullets, within the cavity of the chest to perpetuate the discharge—it is of the highest importance to exclude the air. This is not always practicable, since the opening, however carefully made, is exceedingly prone to become fistulous, and not unfrequently the flakes of lymph so block up the channel that nothing but a free opening will answer. There are many surgeons and physicians, also, who do not regard it as a matter of any moment whether the air is admitted or not. These opinions have become especially prevalent of late; and, in proof that it is just as well to admit the air as to exclude it, they who entertain these opinions refer to many examples of recovery after free incisions. It is not, however, entirely a question of life to the patient which we are considering. The essential purpose which the surgeon has in view in excluding the air is to give the lung an opportunity to expand, and thereby to restore its function; and it is probable that this never happens to any great extent when the orifice remains permanently open until the cure is completed.

It is perhaps hardly worth while to discuss this point so important, as we think, in its relations to empyema, as it occurs usually in civil practice, and as it results from punctured wounds in battle, since, in the empyema which results from gunshot wounds, the admission of air, if it has not already preceded the operation, becomes almost inevitable after the operation, from the fact that the formation of matter is so persistent; the orifice made by the operator sooner or later becoming an established and open fistula.

Moreover, in a very large proportion of these cases, there remain some small spiculæ of bone or other foreign substances, whose escape would be favored by allowing the wound to remain open. It will be seen, therefore, that, excluding those examples in which it is found impossible to keep the wound closed, and also those in which it is not desirable to keep it closed, very few cases will remain to which the rule can be properly applied. In short, we shall only attempt to exclude the air after the operation when it is known that there is no foreign substance within the chest, and even then a failure must generally be anticipated.

In order to facilitate the escape of a foreign body which lies loose in the cavity of the thorax, the orifice needs to be large and in a proper situation. If its exact position becomes known, and it cannot be reached otherwise, the surgeon will not, in general, hesitate to make an incision for its removal. The sooner it is removed the better, because its continued presence will perpetuate the discharge, and because every day the intercostal spaces are becoming diminished by the contraction of the side of the thorax, until at length, in some cases, the ribs nearly meet, and a free opening into the chest could then only be made by the removal of a portion of one of them.

When air has once been admitted, in a case of empyema, I fully believe that thereafter the wound should remain open; and the larger the orifice the better it will be for the patient. It is probable that a very small amount of air admitted will insure decomposition of the pus as certainly as a larger amount; and when decomposition has commenced, it is neither possible nor desirable to maintain occlusion.

We shall observe now, gentlemen, that the patient never fails to experience an increased difficulty in respiration, and that most of his other symptoms are aggravated whenever the wound is temporarily closed, and that he is relieved the moment it is opened again.

The process of cure in empyema is slow, tedious, and too often, unfortunately, ends in hectic and death. There are several causes which may operate in causing this delay.

The bullet sometimes perpetuates the suppuration; a piece of cloth is occasionally left in the track through which the bullet has passed; very often small fragments of the ribs, of the sternum, or of the scapula have been carried in. To these causes we may add at first incessant motion of the ribs in the act of respiration, which in some measure prevents adhesion even when the surfaces come in contact; but especially the collapse of the lung, in consequence of

which an enormous cavity is left, upon which the ribs and diaphragm contract only slowly, and a portion of which has to be filled up with granulations and layer after layer of fibrin, the lung itself, in most cases, only expanding again to a very limited extent, and after the lapse of many months, or even years.

It is plain, therefore, that the great object of the surgeon must be to allow the matter free egress, and to sustain the general system. Never for a single day ought the abscess to be closed, lest the confined matter, finding no other way of escape, should penetrate the walls of the thoracic cavity, and make channels for itself in other directions. When once the pus has found a way into the cellular tissue outside of the pleura, no limits can be given to its aggressions, and a speedily fatal issue may fairly be anticipated. In very many of the autopsies we have seen the pus burrowing deeply among the muscles of the back, underneath the peritoneum, and down even into the pelvic cavity.

As to injections, it is probable that when employed solely for the purpose of insuring cleanliness in the abscess, they will always be of some service; and then tepid water, or tepid water slightly medicated with such disinfectants as the chlorines or the bromides, will answer the indications fully. The fluid should be conveyed into the abscess in the most gentle manner; and then, by turning the patient upon the wounded side, it should be poured out again, in the same manner that we would proceed to rinse out a cask through its bung-hole.

Surgeon Middleton Goldsmith, U.S.V., has employed for this purpose a solution of bromine and bromide of potassium with excellent effects, the proportions being the same as used by him in cases of hospital gangrene. I have myself witnessed the advantages of this solution in cleansing the abscess, removing the fætor, and giving comfort to the patient.

If the orifice cannot otherwise be kept freely open, it should be dilated by the daily introduction of conical gum-elastic tents or sounds, or with tents made of a piece of the bark of the slippery elm tree, which rapidly swells by the absorption of moisture, and which the patient, after a little instruction, will learn to use himself.

The only form of emphysema which deserves special attention in this place is the traumatic variety, and in which the air has been admitted into the areolar tissue underneath the skin.

This phenomenon is quite common after simple fractures of the ribs, when the points of the fragments have penetrated the structure of the lungs; in my recorded notes I find it noticed in 11 cases out of 21; but in gunshot fractures it has happened to me to meet with it much less often. When a rib, being broken, is made to penetrate the structure of the lungs, and at the same time there is no wound upon the surface communicating with the cavity of the pleura, the air admitted into this cavity from the bronchiæ, in the act of inspiration, is driven outwards through the wound in the pleura-costalis during the act of expiration, and now readily passes into the areolar tissue underneath the skin. If, however, the wound in the pleura-costalis communicates freely with the outer surface of the integument, the air escapes externally and no emphysema takes place. Emphysema is produced by the contraction of the thoracic parietes, and not by their expansion; and it follows that the air which causes this phenomena must come directly from the pleural cavity, and this, too, notwithstanding it may have entered the cavity originally through an external wound.

This explanation, as applied to its occurrence in simple fractures unattended with any external wound, is sufficiently simple; but it is not so easily understood how it can happen in compound fractures, where there is an external wound, made perhaps by a bullet, communicating with the cavity of the pleura.

M. DELPECH has been elected a member of the Section of Hygiene of the Academy of Medicine.—*British Medical Journal*.

Original Communications.

NITROUS OXIDE, OR "LAUGHING GAS"

AS AN ANÆSTHETIC,

WITH SOME OBSERVATIONS UPON CHLOROFORM AND ETHER FOR THE SAME PURPOSE.

By A. WESTCOTT, M.D., D.D.S.,

OF SYRACUSE, N. Y.

(Continued from page 147.)

In whatever light we may view this "great discovery," I have yet to see the smallest advantage, in any particular, it has over either chloroform or ether, and there are some objections to its employment as an anæsthetic agent, which do not pertain to either of the other articles. It is well known to almost every school-child that of the air we inhale nearly eight per cent. is retained in the blood, and that a different poisonous article, carbonic acid gas, is returned instead, and that oxygen is absolutely necessary to sustain life. Now in the inhalation of both chloroform and ether a free supply of air is always taken into the lungs in connexion with the vapor of these substances. But how is it with the inhalation of the nitrous oxide? This is breathed from a rubber bag (which is of course air-tight), and thus all the carbonic acid exhaled is returned into the bag to be re-breathed. The gas must therefore necessarily soon be so contaminated as to become actually poisonous. Not only so, it is true that from the first, oxygen is positively excluded—for, as I have already demonstrated, oxygen, to be available for supporting life, must be free; that any amount of it in chemical combination with other substances is not of the least account.

It therefore follows that in addition to every objection which can be urged against the use of chloroform or ether, these two must be superadded to nitrous oxide, viz. the patient is compelled to breathe more or less carbonic acid gas after the very first exhalation, and moreover an atmosphere totally deprived of the life-supporting principle—oxygen.

At best, no one could live longer, if confined to this gas, than he could sustain life without oxygen, and this, as all know, would be but a few moments. Is it not evident that such a gas, breathed in such a way, must always be more or less hurtful and dangerous, unless used by the most skillful and discriminating physician. This danger consists, not so much in the intrinsic qualities of this gas as the difficulty of ascertaining that state of the system in each individual case which contra-indicates, or indeed would be wholly incompatible with its administration. A few weeks ago, a soldier died suddenly in this city, who had just previously been examined by a medical board and pronounced sound and "able-bodied." So sudden and mysterious was his death, that the woman with whom he was at the time boarding was arrested and imprisoned for his murder. But a post-mortem examination, however, released this woman from prison and relieved the public of all doubt as to the cause of his death. "One lung was found to be entirely destroyed by disease, and the other was nearly consumed!" Now if such mistakes as these are liable to be committed by a board of medical men, intrusted with the responsible duty of selecting fit and able-bodied men for our army, what will be the chances for similar mistakes by such men as are urging this gas upon the community as "perfectly harmless"—not one in ten of whom is medically educated or in any way qualified to make such an examination?

Formerly, for a period of eight years, I was engaged in practical chemistry, and during that time I administered nitrous oxide gas as a scientific experiment not less than two hundred times, and in no case did I ever see a person under its influence in a fit state to have a tooth extracted or any other surgical operation performed. During this period, to say nothing of many cases which were of the

most ludicrous and frequently disgusting character, several of an alarming nature came under my observation, which did much to leave on my mind a lasting prejudice against its employment for *any* purpose. One of these cases was that of a young man of about twenty years of age, apparently in full health, who in all respects seemed to be as good a subject as could be presented for a full dose. He had breathed it but a short time before he became entirely insensible and apparently lifeless, and it was several hours before he could be fully restored to consciousness, and several weeks before he fully recovered from its effects.

Prof. AMOS EATON, the founder of the Rensselaer Institute, and a man not only of profound science but of great experience, uniformly in his lectures upon this subject gave the strictest caution relative to its use, and related many instances of its deleterious effects even when prepared and administered by the most skilful and judicious hands, and when carried only to the extent of exhilaration.

In a letter just received from an intelligent dentist of a neighboring city, three cases of its bad effects are related, all occurring within the last two weeks. "In one of the cases the patient is still in such a state as to render his recovery doubtful."

The late fatal case of Samuel P. Sears, of N. Y. city, who died within two hours after inhaling this gas, is generally known to the public, and has excited much comment both in public and scientific journals.

A Mr. Colton, of 22 Bond street, N. Y., in reply to a local article of mine, published in one of our daily papers, says:—"The death of Mr. Sears only very slightly affects the use of the gas as an anæsthetic agent in this city, where all the facts are known." "The facts are, that *he recovered from the effects of the gas* (these effects never last more than two minutes), and did not die till two hours afterwards. The verdict of the Coroner's Jury was that *he died from congestion of the lungs*, and the post-mortem examination showed that one lung was entirely gone from consumption, and the other nearly so; that he was liable to die at any moment—an hour before, as an hour after inhaling the gas. *No blame was attached to the dentist.* The *Medical and Surgical Reporter*, in referring to this very case, says: 'In view of the pathological condition of the lungs of the patient, we have little doubt that the same result would have followed the extraction of the tooth if no anæsthetic had been taken. When a person has so slight a hold on life as this man had, so insignificant a circumstance as the extraction of a tooth might sufficiently derange the nervous and circulatory systems as to induce the congestion that caused the death.'

Now, are these statements, taken in connexion, calculated to give a correct impression to the general reader, circulated as they were in a public newspaper? Did or did not Mr. Sears die from the *effects* of this gas? and should, or should not, "blame" be "attached" to the dentist administering it? Both of these inquiries are answered in the negative by Mr. Colton: "That *he recovered from the effects of the gas*, and did not die till two hours afterwards." He of course recovered from its exhilarating and perhaps from its anæsthetic effects, but this matters very little so long as the *fatal* "effect was induced by its administration."

But let us see how far the Coroner's report, of which the following is a true copy, goes to justify either of these positions:—"The Jury rendered a verdict of death from congestion of the lungs, *induced by the administration of nitrous oxide gas for the purpose of extracting teeth.* We would exonerate the party administering it from all criminal intent, but think there should be an examination made by competent persons in all cases where it is contemplated to use this gas."

The jury thus distinctly say that the congestion of which he died was "*induced by the administration of the nitrous oxide gas for the purpose of extracting teeth.*" The fact that he lived two hours, and did not die immediately from suffocation or asphyxia, does not even modify the assertion

that the inhalation was the cause of his death. The proximity of the cause and effect, in his case, is too great to regard the former even as a remote cause.

As to whether "no blame was attached to the dentist" by the jury, the report speaks for itself. They say, "We would exonerate the party administering it from all criminal intent," but very judiciously add, that "there should be an examination made by competent persons in all cases where it is contemplated to use this gas." But we are not informed whether in this case *any* examination was instituted to learn the condition of the patient, nor could it have been necessary. Would not the *countenance* of a person having so very "slight a hold on life," have clearly indicated the fact to any one of common sense and common observation. But whether there was or was not an examination, nothing is more clear than that this was not a proper case for the administration of the "*laughing gas.*"

In regard to the relative merits of the anæsthetics now in use, either as to their efficiency, safety, or convenience, there can be very little doubt that, while chloroform is quite as safe as ether, and vastly more so than nitrous oxide, its promptness in producing anæsthesia and its pleasantness will always give it a pre-eminence as an anæsthetic agent. I have not had as much experience with ether as with chloroform, and yet I have had enough to lead me to give a decided preference, all things considered, to the latter. I have used chloroform pretty freely for at least fifteen years in my dental practice, and I can say that I have yet to see even the first *alarming*, much less fatal, case. In a note which I received a few days ago from Dr. A. B. Shipman, of this city, upon this subject, he says:—"I have used chloroform within the last fifteen years not less than five thousand times in my private practice, both for medical and surgical purposes, and probably more than two thousand times in the U.S. Army, and in no instance have I seen a fatal case, nor even one which was attended with any alarming symptoms." But notwithstanding this and a host of other similar testimony, together with my own favorable experience with chloroform, I have to confess that I never give chloroform (nor ether) without some apprehension, and in *no* case do I ever administer it without a careful examination into the health and physical condition of the patient, and always feel relieved when the effect has passed off and the patient is fully restored to consciousness.

Both chloroform and ether possess one property which is sometimes, to say the least, exceedingly annoying. I allude to their effect upon the stomach of some persons, which gives rise to vomiting—in some instances quite protracted. I have resorted to several expedients to overcome this difficulty, but rely mainly on having the patient's stomach as nearly empty as possible. It should in no case be given in less than four or five hours, especially after eating a hearty meal, and I think a fasting of eight hours far better in any case. When this tendency (to vomit) is known, I have the patient breathe the chloroform very slowly—taking from ten to fifteen minutes to get him completely under its influence. I have in several cases tried camphor (which chloroform readily dissolves), in combination with chloroform, but I can only say in regard to the result of this experiment, that I have had no case of vomiting when thus using it, though I cannot say that either of the patients would have vomited under the use of chloroform in its pure state.

As this experiment is doubtless a harmless one, I hope those who are constantly using chloroform will more fully test its value. In regard to the manner of administering it, the great point is to give the patient an opportunity to have a *free supply of air* in connexion with its vapor. Next to this, *have the mind of the patient calm*, and, if possible, free from apprehension. I have frequently known dentists and physicians to say to their patients: "I will give you chloroform, but you must take it at your own risk." No surer course could be taken on the part of the operator to defeat his object. I never knew chloroform to

act satisfactorily while the mind of the patient was thus surcharged with fear. I would say to all wishing to use chloroform this—first make up your own mind whether you will or will not give it. If you decide to administer it, never express any fear or doubt as to a good result to your patient; confine all that sort of talk, or even look, to friends, if doubt should be expressed. An eminent surgeon once remarked to me, that it was his experience that nearly twice as much chloroform was often required to extract a tooth as to amputate a limb. The reason is simply this:—Dentists, hoping to avoid administering it by frightening the patient, are obliged to give the first half to get the patient where he ought to have been on the start. I have found the recumbent, or partially recumbent position, the most favorable, and generally have my patient as nearly so as is practicable. Lastly, everything about the apartment should be perfectly quiet. There should be no more persons present than may be needed as assistants, and nothing said or done to draw the attention of the patient. I hardly need add that while the operator should have everything provided for in the way of instruments, etc., this preparation should not be made in the presence of the patient. This is easily done by seating your patient in another room till all is arranged, and your "battery masked." By strict observance of these rules you will be enabled to use the least possible amount of chloroform to produce the desired effect, and I think may have very little apprehension of unfavorable results. I cannot close this article without expressing the wish that every *intelligent* (pardon me for *this* adjective) physician and dentist would take some pains to enlighten the *public* mind in regard to this subject of anæsthetics, and point out clearly their use and abuse, and thus rescue this practice from its control by empirics.

SYRACUSE, N. Y., Feb. 18, 1864.

AN ABSTRACT OF A COMMUNICATION

RELATING TO THE SUCCESSFUL TREATMENT OF MEMBRANOUS CROUP BY THE HOT VAPOR BATH METHOD.

Read before the N. Y. County Medical Society.

By M. MORRIS, M.D.,

OF NEW YORK.

At 11 o'clock on Sunday morning, February 26, 1860, I was called to see a boy two years and one month old, who had been suffering from a severe cold for several days. I found the child presenting the ordinary signs of incipient membranous croup. An emetic, hot water bath, and an expectorant mixture were ordered. After the administration of these, there was an apparent abatement of the symptoms; thereupon a mercurial purge was administered. As night approached, however, the symptoms again became aggravated, and there was again repeated the emetic, hot water bath, and the topical application of a strong solution of nitrate of silver to the throat, which again produced partial relief to the patient. During the night steam from boiling water was frequently inhaled to the relief of the urgent dyspnoea, but no permanent abatement in the progress of the disease ensued.

On the morning of the 27th, the dyspnoea had become suffocative, and the patient's strength was rapidly failing. Dr. Geo. A. Peters was called in consultation. It was agreed that the case was clearly membranous croup, and the operation of tracheotomy was decided against. The topical application to the throat was changed to tr. iodine, various emetics were given, and the inhalation of steam persisted in without relief to the patient, who gradually became worse.

About midday some relatives of the family, without my knowledge, called in Drs. Sayre and Church, who, recognising the imminence of the case, advised and urged the immediate operation of tracheotomy. I opposed this measure, and being sustained by the parents, I suggested as a dernier ressort, the more efficient use of hot vapor, in a

general mode, by filling, at a high temperature, the atmosphere with a dense cloud. This was acceded to by both gentlemen, who suggested several plans to accomplish this. Having tried these without avail, I finally adopted the following, which was to place a number of large tin pans in different parts of the room containing boiling water, and in these to immerse heated bricks and sad-irons, until the room became thickly clouded with steam; also the temperature of the room was raised to one hundred degrees as an average. Soon after fully establishing this condition of the atmosphere of the room, although the process was exceedingly oppressive and exhausting to the attendants, the patient began to exhibit signs of relief. This treatment was continued during the night without relaxation, with evident benefit to the patient, so that on the morning of the 28th the dyspnoea was diminished and the breathing had assumed a less stridulous character, the cough was less harsh, and the expectoration had become profuse, the sputa being copious, and of an opaque, gelatiniform character. The pulse had improved in strength, and was about 110 in frequency. The skin was bathed in perspiration, and the pink color had returned to the lips. The vaporizing treatment was continued as efficiently as before. The throat was occasionally sponged with dilute tr. iodine, and the patient was given milk punch or wine whey and beef tea, which had been given the day before, but had not been taken by the patient to any extent, until some relief from the urgent dyspnoea had followed from the hot vapor treatment, when he commenced to take nourishment freely.

This plan of vaporizing was continued without intermission until the 30th, a period of seventy-two hours, when the patient became entirely relieved. Dyspnoea and all hoarseness and stridulous cough had subsided. He had partaken freely of nourishment and stimulants, which restored his strength rapidly. The vapor and temperature were now gradually lessened for the two succeeding days, until the atmosphere of the room had assumed only a moist condition at 80 degrees. From this time the patient continued to convalesce with judicious precautions, and survives to this day.

I remained constantly with this patient during the seventy-two hours of the vaporizing treatment, and I was thus enabled to determine the maximum and minimum degrees of heat and vapor, which were necessary to afford constant and permanent relief. These were from 90 to 110 degrees of Fahrenheit. Below 90 degrees the dyspnoea and stridulous inspiration would increase, above 110 degrees the pulse would indicate exhaustion. And this heated atmosphere required to be charged with steam to the extent of a dense cloud continually.

This general application of steam in an atmosphere of high temperature for the treatment of membranous croup, was suggested to me by the investigations and treatment of œdema glottidis, during the years 1848 and '49, by my former preceptor Dr. Gurdon Buck, who advocated and used inhalations of steam as one of the means of treatment in this disease.

On the 18th of February, 1864, I was called to attend a girl seven years old, who had been suffering with catarrh and croupy symptoms for two days. The mother had given emetics and used some domestic remedies, but the child rapidly grew worse. I was summoned at 5 P.M. The patient was evidently suffering with incipient croup. The tonsils were greatly swollen and inflamed, and abundant mucous secretions blocked up the fauces. A stimulating expectorant mixture was ordered, and instructions given to generate steam in the room to as great an extent as possible. At 9 P.M. dyspnoea had increased; breathing more stridulous. Ordered an occasional emetic of ipecac. Vaporizing had not been done efficiently, consequently gave more explicit instructions to continue the treatment. On the 19th, however, the patient was much worse. The disease had increased. The dyspnoea had become urgent, cough was croupy; there was loss of voice; her strength was fast failing. The steaming process had not been main-

tained efficiently during the night, consequently no benefit had resulted from it. Considering that if the operation of tracheotomy would avail in this case, no time should be lost, I called in consultation, at 3 P.M., Drs. J. K. Merritt and Geo. A. Peters. It was decided not to operate—as there appeared to be a diphtheritic element in the case. Prognosis considered to be decidedly unfavorable. The treatment, however, was ordered to be as follows: two and a half grains each of chlorat. potass. and muriat. ammon. to be given every two hours; five grains sulph. cupri whenever the paroxysms of dyspnoea are suffocative. Milk punch and beef tea ad libitum, and the vaporizing process to be thoroughly instituted and maintained. At the suggestion of Dr. Merritt, a corner of the room was inclosed by means of a thick quilt suspended from the ceiling; within this was a gas bracket, to which was connected a gas stove; upon this was placed a large tin boiler partly filled with hot water. The patient was taken within this inclosure and held in the arms of an attendant, she being less oppressed for breath in such position.

It was soon found that the gas apparatus did not generate sufficient steam or heat; consequently heated bricks and sad-irons were frequently immersed, and the fire in the room increased so as to raise the temperature in the inclosure to 100 degrees mean, and to keep the atmosphere charged with a continuous dense cloud of steam. This vaporizing procedure was fairly established at five P.M.; Dr. Merritt and myself visited the patient at eleven P.M. together. The disease was evidently held in check; dyspnoea slightly diminished; inspiration not so stridulous; cough less ringing and harsh; expectoration more free, and the sputa consist of a tough viscid mucus. As the breathing becomes less labored, she is more inclined to take nourishment and stimulants. Her strength no longer fails; pulse, although very frequent, is yet somewhat fuller. On the 20th, after fourteen hours' steaming process, there is a positive amelioration of the disease. Dyspnoea not so urgent; expectoration quite free. Voice returning; inspiration less stridulous; cough loose and humid; general condition improved. Two P.M., twenty-one hours' steaming; patient steadily improving. Her mother states that two hours previously she coughed up a tough piece, about an inch in length, which was curved transversely, and was quite different from the rest of the sputa, quantities of which she is now expectorating, which is of an opaque, gelatinized character. Six P.M., twenty-five hours' steaming. There is a slight exacerbation of the symptoms. The vaporizing process, which has not been quite so effective during the day, is now actively instituted again, and ordered to be persisted with during the night. 21st—Thirty-nine hours' steaming. The exacerbation subsided at three o'clock this morning; from this date the disease gradually diminished, the patient gained strength and appetite; so that on the morning of the 22d, sixty-three hours' steaming, she was disposed to have her toys to play with, being still in the vapor bath, at somewhat less than previous efficiency; at this time she was coughing up freely tough, opaque pieces, which seemed to be broken down false membrane involved in semi-gelatinized mucus. 23d—The patient is so rapidly convalescing, that at the end of about seventy-three hours' steaming she is no longer confined in the inclosure, but allowed to be in the room at 80 degrees, with a moist atmosphere. Some three days after the last note, the patient was suffering from a slight attack of pneumonia consequent upon undue exposure and want of care; from this, however, she soon recovered, and has since appeared perfectly well.

In a general summary of these two cases of membranous croup, successfully treated by the general application of a steam bath at a high temperature, there are some points novel, and worthy the consideration of the profession. The diagnosis was beyond a question cynanche trachealis, attended with the formation of false membrane. The operation of tracheotomy afforded but little hope of ultimate recovery. The hot vapor in both instances afforded

entire relief from impending suffocation. By its continued thorough use, the membrane was evidently arrested in its formation, partially dissolved, and finally detached from its attachments and ejected. There are three prominent points in the treatment which I desire to vividly impress upon all, viz:—

1st. The hot vapor must pervade the atmosphere breathed by the patient to the point of a dense cloud.

2d. The thermometer must be closely watched, and the temperature kept between 90° and 110° of Fahrenheit.

3d. The treatment must be *thoroughly persevered in* until all croupy symptoms have disappeared, which in both instances required about seventy-three hours, after which time some moisture must still be persisted in, or symptoms of bronchial irritation will supervene.

REMARKS ON

AXILLARY AND SUBCLAVIAN LIGATIONS,

WITH CASES,

By OTIS M. HUMPHREY, M.D.,

SURGEON, U.S.V.

Not remembering the statistical results of the recorded instances of ligation of the axillary and subclavian arteries, and without the opportunity for reference at hand, I am unable to state the proportion of successful cases of each of these two operations, or their comparative security from recurrence of hæmorrhage, or the probability of recovery to patients. From the two following cases in my own experience, and from observation, I am inclined to three conclusions:—

First. That both operations are both simpler and safer than they are generally regarded.

Secondly. That, of the two ligations, that of the subclavian affords the greater security from recurrence of hæmorrhage; due not only to the fact of the distance of the practicable point of ligation in its third portion from any branch in its continuity, but due also, seemingly, to the circumstance that its canal of exit between the scaleni muscles is bounded and supported by the first rib and the firm structures of the scaleni, and that the constriction of that canal, resulting from inflammation temporarily set up in the muscles and adjacent tissues by the laceration consequent on the operation, must serve to reduce the calibre of the artery, and of course the force of the circulation, the arterial pulsation, and the strain on the ligated extremity.

Thirdly. That in case of secondary hæmorrhage from the axillary artery, the subclavian should be tied *fearlessly and without delay*, as by any other, or temporizing course, we are almost surely sacrificing our patient, or risking his chances for recovery after a later ligation of the subclavian, by loss of blood in the almost certain recurrence of hæmorrhage. Certain it is that patients presenting no greater discouragements than the following cases, have been allowed to lie and bleed to death by dribblets from the axillary artery, with no interference further than compression, styptics, and posture (of what use in the case of so short and large a trunk?) under the impression of inutility and danger of further operative efforts. In the first case following there is good reason to believe that a conservative delay to operate, with the utmost care and vigilance, lost a life.

Case I.—Augustus Reed, private, Co. B, 60th Mass. Vols., æt. 18 years, was struck by a three inch solid shot at the battle of "Deserted House," Va. His right arm was carried away from near the shoulder-joint. It was early in the morning, and very dark, and before he could receive any surgical aid he had lost blood freely. Amputation was performed at the shoulder-joint by Surg. Harlan, 11th Pa. Cav., barely sufficient flap being obtainable—and that injured—to cover the stump. The axillary artery was followed down as deeply as possible, and the ligature applied, as was believed, to an uninjured point on the vessel. After the operation, he rallied well under tonics, stimulants, and

concentrated nourishment, in the regimental hospital in Suffolk, though the flaps sloughed away, leaving a large, bare, transverse stump. Anticipating possible hæmorrhage, a close watch was kept, and the nurses were instructed in that event to make instant subclavian compression. Notwithstanding these precautions, while the patient was sleeping about midnight of Feb. 6th, hæmorrhage occurred profusely, and before compression could be effected, patient lost probably two quarts of blood. The following morning, the compression having been gradually removed, no further loss of blood had been sustained; circulation feeble, but patient pretty bright. D. W. Hand, Surg. U.S.V., Med. Director Peck's Division, and Surg. Harlan, were called in consultation, and it was decided that as there was now no tendency to hæmorrhage, and it could not be positively determined that it was the axillary artery which had opened, the operation of ligating the subclavian should be deferred, in the hope of its non-recurrence, a constant watch being kept on the stump. A week passed with occasional inconsiderable oozing. In the evening of the 13th the vessel again opened. The parts about the shoulder were much swollen, and before compression could be effected there was an additional loss of more than a quart of blood, producing in the patient extreme exhaustion. The following morning the subclavian artery was tied through the subclavian triangle, by the writer, assisted by Surgeons Hand and Harlan. The superficial nervous branches and veins were kept well retracted, and the artery was reached and secured without the loss of a spoonful of blood. Reaction after the anæsthetic was not vigorous, but encouraging. Every sustaining measure was adopted to support the patient. He sustained no further hæmorrhage, and the vessel acquired a secure plug; but the drafts on his vitality had been too heavy, and he died in four weeks from the last operation, of asthenia. A peculiar feature of the case was, that during these weeks, the tegumentary and areolar margins of the wound suffered a constant phagedenic erosion, so that the incision above the clavicle became a broad ellipse.

Case II.—Henry Kilmann, æt. 21, private, 12th Maine Vols., Co. G, suffered compound comminuted fracture of both bones of the left forearm and elbow-joint, with severe laceration of the muscles of the arm, by a railroad accident, near New Orleans, La., Jan. 17th, 1864. Some time elapsed before he was discovered and brought into this hospital, no attempt having been made to check the free hæmorrhage. The writer immediately amputated at the junction of the upper with the middle third of humerus, and as good a flap was selected as the injured tissues would permit. Some half dozen arteries were secured by ligatures, well and deeply applied. The usual dressing and treatment were adopted; condition and prognosis very favorable. Nothing untoward happened till the night of the 23d, when some hæmorrhage occurred from the stump; controlled by elevating it. On the night of the 24th there was slight bleeding; again controlled as before, without repetition, till the night of the 31st, when, while patient was asleep, hæmorrhage occurred copiously and in a full stream, to the extent of three pints or more. A tourniquet was applied above till morning, when the artery was tied in its third portion by the writer, assisted by J. B. G. Baxter, Surgeon U.S.V., in charge, and several of the medical gentlemen attending. The vessel presented a healthy appearance. A degree of prostration followed the hæmorrhage and the anæsthetic, but under a forced sustaining regimen patient improved fairly, till the evening of Feb. 7th, when the axillary artery opened at the point of ligation, and although a trained watch was at hand, it was estimated that two quarts of blood were lost before effectual compression could be made on the subclavian, which, in order to control the open vessel till daylight, had to be continued almost constantly. On the morning of the 8th, assisted by Surg. S. Kneeland, U.S.V., and others, I ligated the subclavian in its third portion, through the subclavian triangle. The vessel lay very deep, and, to make

sufficient room, it was necessary to freely incise the trapezius, and tie the superficial veins, which were much enlarged. The vessel was reached, found to appear healthy, and tied with a ligature composed of three threads of ordinary suture silk. After restoration of consciousness, patient was found greatly depressed, with hands and feet cold, and stump very cold and anæmic. Brandy was administered, and hot alcoholic fomentations applied to the extremities, also to the stump, and was continued to the stump till it produced vesicles, for which was then substituted warm dressing of a weak solution of ferri sulph. The best nourishment, with milk, milk punch, beef-esence, brandy egg-nog, were urged, and tr. ferri sesquichlor., quiniæ sulph., and ext. nucis vom. continued. The stump was saved from gangrene, but a sinus, which had formed in its posterior aspect previous to the last operation, greatly enlarged, and discharged from the corner of the flaps about a pint daily. Irritative fever set in. ʒj. ol. morrhue, ter in die, was added. The fever yielded in a few days, and by Feb. 15th there was no apprehension from pyæmia. By the 29th all the ligatures had sloughed away without the slightest hæmorrhage, and at this writing, March 8th, the man has a good appetite; the wound above the clavicle has nearly healed; the stump is well nourished; the flaps are nearly healed and seem closed; and he can, without exhaustion, sit up three hours at a time. There is no reason to doubt his speedy and perfect recovery of robust health.

BARRACKS U.S. GEN. HOSPITAL,
NEW ORLEANS, LA., March, 1864.

Progress of Medical Science.

TREATMENT OF CONSUMPTION.

THE *Med. Times and Gazette* for Feb. 6 contains an article by JOHN K. SPENDER, Surgeon to the Eastern Dispensary, Bath, "On some points in the medicinal treatment of chronic pulmonary consumption." Instead of contenting ourselves with the aphorism, "that the fact of a large number of substances being alleged to cure a disease, is a demonstration of its incurability," our author would have us first lessen our therapeutic ignorance, by ascertaining the exact limits of our knowledge; and then, to make the most of all the certain knowledge we possess. Commencing with the fundamental fact laid down by Hughes Bennett, that "phthisis pulmonalis is a disease of the primary digestion," producing that constitutional state which precedes the development of tubercle, "the excess of acidity in the alimentary canal" more than neutralizing the alkaline secretions of the saliva, and of the pancreatic juice, rendering them incapable of "either transforming the carbonaceous constituents of vegetable food into oil, or of so preparing fatty matters introduced into the system, as will render them easily assimilable," he arrives at the first therapeutic necessity, that *alkalies are, as a rule, beneficial*. Where there is "diseased primary digestion" the blood will be deficient in red corpuscles, from which comes the second therapeutic necessity, the administration of *iron* (Trousseau to the contrary notwithstanding), and an abundance of meat-food.

The third therapeutic necessity arises from the emaciation which accompanies the disease, and suggests the employment of that class of food and medicines, of which *cod-liver oil stands at the head*. These are his "three main therapeutic postulates;" all other remedies are regarded as mere auxiliaries. Of the alkalies, we have potash-water, bicarbonate of potash, lime-water, and the aromatic spirits of ammonia. Most of the salts of iron cannot be combined with an alkali without undergoing decomposition, but the potassium-tartrate of iron is free from this objection, and may be prescribed as follows: *R. Ferri potassio-tart., gr. v.; spts. ammoniæ arom., M. xv.; spts. ætheris chlor., ℥ x.; aquæ puræ, ad ʒi. M. ft. haustus*. This may be taken two or

three times a day, and if the patient choose, the appropriate dose of cod liver oil may be taken in combination with the draught, with which it is easily miscible. When diarrhoea exists, the saccharated carbonate of iron, united with the chalk and opium powder, may be substituted for the iron and alkaline draught, and continued until the diarrhoea is relieved, that the "primary digestion" may resume its proper functions. Particular remedies to meet particular exigencies may be employed, subordinate to these three great principles. Night sweats are best relieved by a few grains of oxide of zinc.

OIL OF MALE-FERN IN TAPEWORM.

On this subject, ALEX. FLEMING, M.D., etc., Physician to the Queen's Hospital, Birmingham, thus reports:—

"The usefulness or otherwise of the oil of male-fern in tapeworm, and the best mode of exhibiting the drug, were the special objects of this inquiry. The question was issued on the 22d of November, 1862; and the schedules filled up have been returned to me by several gentlemen.

"Total number of cases 100.

"*Sex.*—Of these 100 cases, 30 were males, and 70 females. The remarkable preponderance of the female sex among the subjects of tapeworm, here shown, and, as I believe, for the first time on numerical data, is full of interest in relation to the cause of the disease, and most deserving of further inquiry. The great majority of the cases embraced in this report are taken from hospital out-patients, among whom the women suffer frequently from dyspepsia, very much more so than do the men; and we can readily understand how the 'measle' will have a higher chance of escaping death in a weak stomach, and subsequently making a home for itself in the bowels. As respects the diet itself, the risk run by men must be greater than that by women; as they eat a larger proportion of animal food, and, in Birmingham especially, of pork. Our returns show that the male-fern, as a remedy, is of equal efficacy in both sexes.

"*Age.*—The age of the patient is not mentioned in 8 of the cases. Of the remaining 92, the average age of all, in round numbers, is 29; of the females, 30; of the males, 28. The returns include cases of all ages except infancy, and prove that the oil of male-fern is an efficient remedy as well in the child as in the adult. A child of 1 year and 11 months is the youngest, and a woman aged 69 the oldest example. The exclusive milk diet of infants, and consequent freedom from the cause of the parasite, explains their immunity from tapeworm.

"*The Duration of the Disease* is not given in 33 cases. Of the remaining 67, it is stated to vary from a few days, as in four cases in Dr. Anderson's schedule, to 36 years, as in the example reported by Mr. Anderton. There are 11 cases whose duration varies from 6 weeks to 10 months; 16 are reported of 1 year's duration; 9 of 2 years; 4 of 5 years; 3 of 7 years; 3 of 10 years; 1 of 12 years; 1 of 14 years; 2 of 20 years; and 1 of 36 years. The returns show that the oil of male-fern has been as efficient as a remedy in cases of long standing as in the more recent.

"*Previous Treatment.*—In 35 of the cases, it is stated that there was no previous treatment. Among the remedies which had been used in the others, kousso was employed twice—once with, and once without success. Turpentine had been given on fifteen occasions—seven times with, and eight times without success. The oil of male-fern had been previously used five times—three times with, and twice without success. In one of those cases where it had failed, it was subsequently given in mixture with milk, in the mode which I have suggested, and with perfect success.

"*Dose, Time, and Mode of Administration.* *Dose.*—The medicine has been administered in doses of a few minims, of half a drachm, of one drachm, one and a half, and of two drachms. The returns show that one drachm is a sufficient dose; at least, in the great majority of cases. The larger doses more frequently excite sickness, vomiting, and diarrhoea.

"*Time.*—In many of the cases, the oil was given in the morning; in a greater number, at bedtime. The results of the two methods, when compared together, do not show any material difference in success. I prefer to give the drug at bedtime, because the patient should continue to fast for eight or ten hours after taking it; and it is easier to do so during sleep than waking.

"*Mode.*—In 47 of the cases, the oil was given with milk, in the manner which I had myself suggested in the observations which accompanied the schedule. The following is the formula referred to.

"Mix well of oil of male-fern one drachm, and mucilage half an ounce. This draught is mixed with one ounce and a half of sweet milk, and taken at bedtime; the patient having omitted the dinner and evening meal of that day. Taken thus, on an empty stomach, the mixture is carried speedily into the intestines, to feed, and at the same time poison, the hungry parasite which nestles there. Milk is the favorite food of the worm. Next morning a dose of castor-oil may be given. If necessary, this medication may be repeated daily, one, two, and three times, or until the worm is discharged.

"In the remaining cases, the drug was given without milk, in mucilage or some aromatic water. In nearly all the cases comprised in the returns, care was taken to give the remedy on an empty stomach. The two classes of cases, therefore, or those in which the male-fern was given with milk, and those in which milk was not used, admit of fair comparison; and of the higher efficiency of the first of these methods of exhibition the returns are conclusive. So given, the drug acts more quickly, and at the same time more efficiently. The proportion of failures is nearly the same with both methods; but the length of worm discharged, and, so far as we can judge, the thoroughness of the cure, predominate in those cases where milk was used.

"*Physiological Effects.*—Sometimes the medicine operates without pain or nausea; more often, there are sickness, griping pains, and purging. Vomiting is reported in ten of the cases. Dr. Bree observes that under its use, the urine was usually loaded with lithic acid. In one of Dr. Anderson's cases, the menses, which had been absent for several months, returned after the use of the oil. The vomiting and purging were caused frequently by the second dose, after the worm had been discharged; and must be ascribed to the action of the drug itself on the gastro-intestinal mucous membrane—not, as some have thought, to the dying struggles of the poisoned worm, though it may be that these play some part in their causation.

"In five of the 100 cases, the worm was discharged alive. Except that it was expelled with unusual speed, I cannot trace any circumstance to account for the living state of the parasite in these examples. The largest portion of tapeworm which is reported to have been passed is fifteen yards. This was in Dr. Bennett's case. No mention is made of any other species of tapeworm than the *tænia solium*. Large round worms were discharged in two cases.

"The worm was for the most part expelled after the first dose, but in a few cases not till after a second or third dose. The worm was often passed before any purgative was taken, and separately from the ordinary evacuation. In one instance recorded in Mr. Thompson's schedule, the worm was discharged upwards by vomiting. This was the case of a female aged 40, who had suffered many years from tapeworm. She took one drachm of the oil of male-fern in milk, according to my formula; and in the course of an hour, vomited a very long tapeworm, which was quite dead. None passed by stool. After two days, the draught was repeated; and she passed a large quantity of dead and broken tapeworm. The patient had previously taken various remedies without success. In Dr. Anderson's schedule, the case of a girl aged 18 is narrated, who became very sick after taking two drachms of the oil of male-fern in milk, and vomited a large round worm. She was afterwards purged smartly, and passed a quantity of joints of tapeworm.

"The average time which elapsed between the administration of the oil and the expulsion of the parasite was six hours. It was discharged in half an hour in seven cases, in one hour in nine cases, in two hours in six cases, in three hours in three cases, in five hours in six cases. The longest interval mentioned is twenty-four hours.

"In several of the cases, the worm was passed in a broken and softened state. In these cases a considerable interval had elapsed between the taking of the oil and the expulsion of the worm, the softened condition of which was probably due to a more or less complete digestion of the already poisoned and dead worm.

The head is reported to have been found in three cases (schedule of Mr. Spender); but in one of these its discovery rests only on the authority of the patient. It is generally thought that the rarity with which the head is obtained is due to its not being killed and detached with the body; but it seems improbable that the poison should take more effect on the body than the head of the creature, and which it meets first in its passage downwards from the stomach. According to Dr. Nelson, the food is taken in chiefly by the head. I am more inclined to refer the rare discovery of the head to its solution in the digestive fluids. Thin and delicate, it must be easy of digestion. Moreover, placed higher up in the canal, it is in closer proximity to the more active solvent juices. The thin and translucent neck, though found more often than the head, is also generally absent; and probably for the like reason. I am disposed to refer relapses to the growth of other worms which have escaped the action of the poison, and not to the resprouting of the old head.

"*Duration of the Cure.*—Though relapses often occur, there is reason to believe that the cure is permanent in a large proportion of the cases. The length of time (one year) assigned to this inquiry, and the difficulty of ascertaining the future history, especially of hospital patients, render the returns in reference to this important point unavoidably of less value than we could desire. I may mention in this place, that Mr. Osborn, in a note to his schedule, states that two cases of tapeworm are known to him, both females, of 38 and 17 years of age respectively, where the oil of male-fern was used with success, and where the patients remained, to his knowledge, well for many years. In concluding this report, it is only just to remember, in connexion with our subject, the early labors of Peschier of Geneva, and dating so far back as 1830, but which had been almost overlooked in England until Dr. Chrisison, in 1853, gave the sanction of his authority to the results of Peschier's trials. The later experiences of Drs. Gull, Jenner, Bennett, Willshire, Ransome, and others, have abundantly confirmed their observations, and, conjoined with the results of the present inquiry, establish beyond doubt the great efficacy of the oil of male-fern in tapeworm, and its superiority to the other known remedies of this disease. Further, our report points very decidedly to the most efficient mode of exhibiting the drug; and the whole inquiry has, as I have reason to know, rendered excellent service to therapeutics by making the virtues of the oil of male-fern more widely known and employed throughout the profession. It remains only for me to offer my best thanks to all the gentlemen who made returns to me for their valuable aid in this inquiry."—*Brit. Med. Journ.*

DEATHS IN LONDON.—An infant, aged three weeks, was last week poisoned by a lozenge which contained the forty-eighth part of a grain of morphia. A child, aged two years, died from the scratch of a kitten. Nine nonagenarians died in the week.—*Brit. Med. Jour.*

DR. STADFELDT gives a valuable memoir on placental remains in the uterus after labor at term and abortion. He agrees with Braun in opinion that such remains may occasionally be developed long after into forms of polypi, giving rise to all the symptoms of polypus.—*Dublin Med. Press.*

American Medical Times.

SATURDAY, APRIL 2, 1864.

SALE OF DISEASED MEATS.

Among the subjects relating to the public health which should interest every citizen, that of the sale of diseased meats is of prime importance, and merits especial attention. We read the weekly reports of the City Inspector and of the police, of the amount of diseased meat which they seize and remove, and though astonished at the enormous aggregate, are accustomed to believe that the whole has been removed from the market. But such is not the case. We should come nearer the truth did we estimate the amount removed as the hundredth, and perhaps thousandth, part which finds its way to the tables of the laboring classes, who are compelled to buy the cheaper class of meats. Since the introduction of railroads, the increase of diseased stock in our markets has been very marked. Not only does easy transportation facilitate the conveyance of diseased animals, which would otherwise be allowed to die in the country, but many healthy animals are so bruised in transit that, when slaughtered, large subcutaneous abscesses are disclosed. Formerly, stock reached the markets of large cities only by the slow process of foot-travelling, but this necessitated the feeding of animals at proper intervals, in order that they might retain their flesh. They thus reached their destination by easy marches, foot-sore perhaps, but never reduced in flesh, nor weak from suppurating sores. In railway transportation the whole system is changed. The stock is crowded into open cars, often hundreds of miles distant, exposed to the weather, unable to lie down, jammed with violence against the sides of the cars by the motion of the train, or the crowding of others; and to add to this cruelty, deprived of food and water until they are slaughtered.

Observation confirms our logical conclusions from such facts that few, very few perfectly healthy animals are now slaughtered in our large cities; but as yet no sufficient inquiry has been made to determine the extent of this evil. In England, where due importance is attached to every cause or measure affecting the public health, the subject of diseased meats has attracted great attention, and a bill has been introduced into Parliament designed to effect the desired reform. From a speech in Parliament, by Mr. Bruce, some instructive facts were developed in regard to the diseases of cattle. He stated that statistical tables show, that, in the six years from 1855 to 1860 inclusive, the average annual mortality among cattle was nearly 5 per cent.; the annual death-rate for sheep is estimated at 4 per cent. In regard to pigs, the estimated loss in Ireland is 10 per cent.; in England and Scotland it is much less. The most fatal of diseases is pleuro-pneumonia, from which at least half of the cattle died. He stated that an enormous mass of diseased meat, in various stages of disease, is annually sold. What the precise quantity is it would of course be difficult to estimate. Professor Gamgee estimated it at one-fifth. There is no conclusive evidence on the subject, although there is ample evidence that the quantities are very large, not only

of meat killed while cattle were diseased, but of cattle which had died without the aid of the butcher. MR. BRUCE took the case where the figures were beyond dispute. The deaths in dairies are most numerous. In Edinburgh Prof. GAMGEE gave returns from eighty-eight dairies, for the year ending 1862. Out of 1,839 cows kept, 1,075 were sold diseased, of which 791 were sold to butchers, and 284 to be consumed by pigs. In nine dairies in Dublin, on an average of twenty years, out of 315 cows, 161 were sold diseased.

Professor GAMGEE says:—"In London I have seen butchers in private slaughter-houses dress extremely diseased carcasses and 'polish' the meat. This filthy practice consists in killing a good fat ox, at the same time that a number of lean and diseased animals are being killed. Boiling water is at hand, and when the lean animals have been skinned their flesh is rubbed over with fat from the healthy ox, and hot cloths are used to keep the fat warm, and to distribute it over the carcass, that it may acquire an artificial gloss and an appearance of not being totally deprived of fat. In Edinburgh I have seen sickly lambs without a particle of fat upon them dressed up with the fat of healthy sheep, much in the same way. From the private slaughter-houses in London I have known even the diseased organs themselves sent to the sausage-maker. In company with another member of my profession, I have seen a carcass dressed and portions of it prepared for sale as sausage meat, and otherwise, although thoracic disease had gone to such an extent that gallons of fetid fluid were removed from the pleural sacs, and that large abscesses existed in the lungs."

In Edinburgh there were between 100 and 200 diseased cattle sold weekly in the meat market. At a meeting of the Royal Dublin Society, MR. GANLEY, salesmaster, said: "That unless some means were devised to give the farmer some compensation for diseased cattle, it was impossible to prevent him from selling them, or the butcher from killing and selling them. Unless some society were formed to have diseased meat paid for, it would be killed and eaten. There was no use in mincing the matter; every one of the salesmen sold diseased cattle. The farmer could not otherwise pay his rent. The disease is so prevalent that he could not live were he to submit his cattle to destruction."

The deleterious effect of diseased meat upon the public health is established by the concurrent testimony of the best medical observers, as proved by MR. BRUCE. Professor MacLagan, of the University of Edinburgh, stated at a public meeting held at Edinburgh in the 29th of January, 1862, that in his practice, both as a physician and a toxicologist, he had met with instances in which several persons had been attacked simultaneously with irritant symptoms after having in common partaken of meat which, on being examined, was found to contain no poison, nor to be in that state of putrescence which, as is well known, occasionally confers upon animal matters actively poisonous properties.

DR. ALFRED S. TAYLOR, F.R.S., in a letter of the 12th of January, 1863, said:—"As a general principle, I think diseased meat noxious and unfit for human food. In the course of my practice I have met with several cases of poisoning which appeared to be attributable to diseased or decomposed meat—more frequently the latter. I can at present recall to my recollection only two fatal cases—one from diseased mutton, the sheep having had the staggers, and one from German sausages. Animal food has been frequently sent to me with a view to the detection of poison, the persons sending it having the impression that from the vomiting and purging produced poison must have been

mixed with it. No poison has, however, been found to justify this suspicion."

DR. LETHEBY stated:—"My opinion of the injurious effects of diseased meat on the health of those who make use of it is very decided. I have seen so much mischief from it that I do not hesitate for one moment to say that some legislative measure is most pressing wanted to prevent, not only the traffic in diseased meat, but also to prevent the slaughtering of diseased animals. Such regulations are now in operation everywhere on the Continent, and they are much needed here. In the city markets alone my officers seize from one to two tons of diseased meat every week. Last year we seized 110,046lbs. of meat, of which 78,697lbs. were diseased, and 13,944lbs. from animals that had died. We often pursue the offenders into a court of justice, and have them fined or imprisoned; but I feel that the mischief should be stopped before it reaches the markets. Officers are wanted to examine the cattle before they are slaughtered. As to the effects of such meat on the human subject, I have seen many cases of illness from it. One of these is sufficiently important to bring under your notice. In the month of November, 1860, a part of a diseased cow was bought in Newgate market. It came from one of the cow-houses in London. It was bought by a sausage-maker of Kingsland, and, as is commonly the case with very bad meat, it was made up into sausages. Sixty-six persons partook of the sausages, and sixty-four of them were made very ill. They were purged, became sick, giddy, and the vital powers were seriously prostrated, and they lay in many cases for hours in a case of collapse, like people with cholera. One man died, and I was requested by the coroner to inquire into the matter. I obtained some of the sausages, thinking that a mineral poison might be present, but I could discover none; and the whole history of the case showed that it was diseased meat which had done the work. Again, Dr. Livingstone tells us that whenever the natives of Africa eat the flesh of an animal that has died from pleuro-pneumonia, no matter how the flesh is cooked, they suffer from carbuncle. Now, it is a very remarkable fact that boils and carbuncles have been most prevalent in this country for several years past. The Registrar-General for Scotland has drawn attention to this fact."

And PROFESSOR GAMGEE said:—"My own observations confirm the opinions of the eminent authorities just quoted. I have known in many instances where meat supplied to students in lodging-houses in this city has led to vomiting, purging, and severe colic. In the majority of instances such meat was cooked in the form of beefsteak. Three of my own students were affected simultaneously one day in December last. Within a couple of hours after dinner they experienced colicky pains, purging, vomiting, and these symptoms lasted several hours. Bread, potatoes, and water were the only other materials they had partaken of at dinner. On another occasion two were affected, but did not attribute the injury to the steak until the next day, when the servant ate what had been left of the meat, and suffered severely."

Such startling facts should awaken the attention of every community that has to depend upon a general market for its meats. In this city we believe the evil, if known, would be truly alarming. But without any organized plan to prevent the sale of improper foods, the market-men have it their own way, and even go so far as to retail such articles on the street. "Meat for boarders" was for a long time the suggestive "sign" overhanging a large meat stall in the neighborhood of the sailors' boarding-houses. In plain words it would have read: "Diseased meat sold cheaply." We cannot, however, anticipate any radical reform until a change in our health organizations is effected. We must have an enlightened Health Board with its skilled medical officers, before this crime against the health of the laboring classes can be adequately punished.

MEDICAL EDUCATION IN GERMANY.

FROM an abstract of a report recently made to the French Minister of Public Instruction, by DR. JACCON, who was sent to study the organization of the Faculties of Medicine in Germany, and published in the *British Medical Journal*, we gather the following facts. There are twenty-five German Universities, each of which consists of four faculties: theology, law, medicine, and philosophy. In each faculty of medicine the instructors consist of three kinds of masters: ordinary professors, extraordinary professors, and private masters. The number of ordinary professors in first class faculties varies from twelve to fourteen; they are nominated to the crown by the ordinary professors themselves; they hold office for life, but at the end of thirty years are entitled to a pension; which usually equals the professional salary. They never give less than five hours of lectures per week; the clinical professors have at least ten hours of lecturing, sometimes fifteen or eighteen hours; Virchow has seventeen hours. The funds for payment of the professors are derived from fixed emoluments paid by the State or by the University, if it be rich enough; from fees paid by the students; and from fees paid for lectures. The extraordinary professors are nominated by the Minister on the proposal of the faculty, and their nomination is for life. They have for the most part no fixed salary, but receive fees. These professors lecture on special subjects, though there are no chairs for specialties, except that of ophthalmology at Vienna. In regard to specialties the writer remarks:—

"Specialties, from a professional point of view, may be reasonable enough; but, from a scientific point of view, no Faculty should admit them. There is a chair of medicine and of surgery, and it is the business of the teachers thereof to satisfy all the eventualities of their programme. No special instruction is admitted into the classical and traditional circle of *ordinary instruction*. But then, on the other hand, the branches called special are largely represented in the instruction of the *extraordinary professors* and private masters."

In addition to these professors, ordinary and extraordinary, there are private teachers employed in medical instruction under the faculty; these appointments are made by the faculty after special examination; they receive fees, and are obliged to give courses of lectures, choosing any subject which belongs to the particular branch of study to which they are appointed.

CRUEL TREATMENT OF UNION PRISONERS.

THE release of a large number of Union soldiers from the loathsome prison-house of Richmond, confirms all the horrible tales of suffering and privation which have, from time to time, reached the North. Many of these persons were so exhausted by starvation, exposure, and the diseases consequent upon ill treatment, that they have died upon the way. The only relief which they experienced was from the supplies sent by our own Government and the Sanitary Commission, much of which was confiscated by the rebels. GEN. NEAL DOW, of Me., who has just been released from a long confinement in Libby Prison, says:—"The rations supplied by the Rebels to the Union officers at Richmond are unfit for human food, and incapable of sustaining life in a healthy condition. They consist only of a small quantity of bread made of corn meal, unsifted and manufactured in the worst manner, and about half a gill of rice two or three times a week. Occasionally, a single medium-sized potatoe

or three or four small ones are given to each man, and three or four times, a small turnip has been given to each. And this is all. The rations furnished to the privates consisted *entirely of corn bread of miserable quality* and insufficient quantity, which produces derangement in the digestive organs and death. The soldiers are slowly wasting away, and die of sheer starvation and cold. Two of them, sent off from Richmond at the same time with myself, died of exhaustion before reaching Annapolis. These poor creatures were reduced to such a state of extreme suffering that many of them were demented. They could not tell the name of their Colonel or the number of their regiment. One of them had become perfectly idiotic from long-protracted suffering, many of them having slept all winter in the open air, with no shelter, and without overcoats or blankets. . . . Passing around the camp at Belle Isle, I saw the wretched condition of our soldiers as to clothing and quarters. Nearly one half of them were without shelter of any kind, and all were in extreme want of clothing. As I passed around the camp they cried to me to send them food. Shelterless and almost naked, as many of them were, their first want was food—their chief suffering was from hunger. . . . I went into the hospital, consisting of tents without any floor, the sick lying upon the ground without blankets, without pillows, some of them with sticks of wood for pillows."

A NEW FEVER NEST.

WE have noticed the death of five of the ten resident physicians of Bellevue Hospital who contracted the fever, and now have to record the fact that three more are prostrated by this disease. The Medical Board of that hospital have taken the alarm, and urged the Commissioners to erect a Fever Hospital upon one of the islands under their charge. The Commissioners have moved in the matter, but, with characteristic disregard of their medical advisers, have erected a barrack in one of the least ventilated and most public corners of the grounds at Bellevue. In every respect this structure is one of the most perfect "fever nests" that ever was devised. No bird ever selected her nest with more care than the Commissioners this nice and snug corner for the incubation of fever. We trust the Medical Board of that hospital will insist upon the removal of this unsightly building, and the erection of a proper hospital on one of the islands for the reception and treatment of fever. They have it in their power, we believe, to persuade the Commissioners to establish a suitable Fever Hospital. The profession will hold them responsible for the misdirection of effort to secure the proper isolation of typhus.

DR. JOSEPH R. SMITH, U.S.A.

OUR attention has been called to a paragraph which found its way inadvertently into our columns from an English periodical, reflecting in coarse and vulgar language upon DR. JOSEPH R. SMITH, formerly of the Surgeon-General's office. The statements, we have reason to believe, were falsely and maliciously made, with the design of injuring a most worthy officer. DR. SMITH has occupied a position in the Medical Staff too favorable to be affected by such a gross attack. As stated by our Correspondent, he was loyal to the Department, and if he fell into errors it was rather due to his zeal for the welfare of its Chief.

RECENT INVENTIONS.

MATTSON'S ELASTIC SYRINGE.—A syringe is an indispensable article of household furniture. There are few

diseases that do not require its use. It is important, therefore, to have as perfect an instrument in every family as can be devised. The syringe of Dr. MATTSON has received the endorsement of many of the leading physicians of the different cities. It is described by the inventor as follows:—

"The contraction and expansion of the bulb produce a vacuum, which causes the syringe to fill with fluid through atmospheric pressure. The new method of fastening the metallic couplings to the bulb renders leakage impossible, and is therefore a desirable improvement upon the old mode of fastening, which is so frequently attended with leakage. The new arrangement of the inlet and outlet tubes renders the syringe one of the most convenient ever introduced, for it can be used with the greatest ease and comfort in any position of the body. The angle of the outlet tube facilitates this use, because the syringe thereby adapts itself to the position of the hand, rather than the hand being required to adapt itself to the syringe."

Correspondence.

SPECIFIC RELATIONS OF DRUGS.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—I noticed the following "correction" recently in the columns of the *N. Y. Tribune*:—

To the Editor of the N. Y. Tribune.

SIR: In your notice of the Commencement of the Homœopathic Medical College of New York on the 2d inst., I find an error in the report of Prof. Guernsey's address to the graduating class, in the following sentence: "*The practitioner might adopt or use any system that should have the effect of curing his patient.*"

Prof. Guernsey desires me to say that the reporter misapprehended his remarks in this particular, as he believes and teaches but one law of cure—and that law is the specific relation of a drug to an organ or function of the human body.

J. BEAKLEY, Dean of the Faculty.

We are thus given to understand that homœopathic graduates, in the opinion of their teachers, are not at liberty to cure their patients except by the "one law of cure," viz. "*the specific relation of a drug to an organ or function of the human body*!"—at least so says Prof. GUERNSEY through Dr. J. Beakley, "Dean of the Faculty."

What new phase will this system next assume? Here is a candid acknowledgment that its supporters would prefer to have their patients die than be cured on any other principle or plan than the homœopathic, or what is so considered. If this is not "zeal without knowledge," it is certainly zeal without humanity. But it illustrates the bigotry of narrow minds, through blind attachment to an unfounded and ridiculous hypothesis.

But PROF. GUERNSEY himself seems not to understand the homœopathic law, which is not "the specific relations of drugs to certain organs," a doctrine taught in all works on *materia medica* and recognised constantly by all practitioners, but, according to Hahnemann, by giving "*medicines which possess the faculty of creating symptoms similar to those of the disease itself, but which are more of an intense nature*"—(*Organon*, Am. Transl., p. 90). In other words, by producing similar artificial diseases. This is a very different thing from "the specific relations of drugs to certain organs." Expectorants have a specific relation to the lungs, cholagogues to the liver, diuretics to the kidneys, diaphoretics to the skin, emmenagogues to the uterine system, narcotics to the brain, etc., and prove curative in consequence of such specific action. Who but homœopaths ever supposed that curative effects of drugs were owing to their *causing artificial diseases*? This doctrine, as every one knows, lies at the foundation of the whole homœopathic system; and yet there is not a single fact or observation which sustains it! No wonder its professed teachers are so rapidly abandoning it! The time is near when not a

vestige of the system will remain, and "none so poor to do it reverence."

In conclusion, and in opposition to Prof. Guernsey, I will quote Hahnemann's first rule (*Organon*, p. 79). The first and sole duty of the physician is "*to restore health to the sick.*" His second rule is no less orthodox: "*The perfection of a cure consists in restoring health in a prompt, mild, and permanent manner.*" When homœopathic practitioners acknowledge and practise according to these rules, they will no longer be classed by the true scientific medical world as the adherents and advocates of quackery, but as belonging to the school of rational, legitimate medicine.

CRITO.

UNJUST ATTACK ON AN ARMY SURGEON.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—In looking over the *MEDICAL TIMES* just received, I was pained to read a most ridiculous note from some one in Philadelphia to an English Surgeon, on Surgeon J. R. SMITH. Having long been acquainted with Dr. SMITH, I am prepared to deny every assertion made. Dr. SMITH may have his enemies, as we all have, but cannot rest their enmity upon any real injury received from him. His position in the Surgeon-General's office was such as would necessarily create ill feelings on the part of individuals towards him. But he was never swerved from his duty by fear or favor.

He was loyal to the Medical Department, and jealously strove to promote its honor and character. He was closely associated with the Surgeon-General, and powerfully supported him in the trying scenes through which this overtasked Bureau had to pass. Dr. SMITH is destined to take a high rank in the Medical Staff as a most efficient executive officer.

Yours, etc.,
SURG. VOL.

DEPT OF THE GULF.

MEDICAL MATTERS IN VICKSBURG.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—The medical affairs of the Gibraltar of the Mississippi, held by the Union forces since the 4th of July last, may perhaps possess some interest for the profession at large, as well as the medical department of the army.

At the time of the first occupation of the city by General Grant, the Medical Director of the Department of the Tennessee was Surgeon Madison Mills, U.S.A., who was soon succeeded by Surgeon John Moore, U.S.V. This gentleman continues still in the office, and lately made a tour of inspection of the hospitals of Vicksburg. I freely bear testimony to the efficiency and courtesy of Dr. M., during my term of service in that department. Through the politeness of my friend and pupil, Thomas C. Coxe, Medical Cadet, I am enabled to present a few facts in relation to the hospitals there.

He says:—"Hospital No. 2 has two hundred and fifty-three patients, under charge of Surgeon Hill, 20th Ohio Vols.; the 'Marine,' under charge of Surgeon Kemble, U.S.V., has two hundred and seventeen patients. The Marine is now more generally known as 'No. 3.' The McPherson Hospital, under charge of Surgeon E. Powell, 72d Ill. Vols., has one hundred and thirty. These are all the General Hospitals now in the place. . . . They all draw full, or nearly so, ordinary rations, while for the lighter articles of diet for the sick, they depend almost entirely upon the 'Sanitary Commission,' whose agency here is well supplied with everything needful, which they issue liberally." Fresh fish and some few vegetables and fruits can be obtained from the market.

Vicksburg, it is well known, is situated in a district of country where fruits, such as peaches, apples, plums, cherries, etc., are easily cultivated. Melons, cabbages, tomatoes, potatoes, and other products of the garden were plentiful before the breaking out of the rebellion. The grounds around the city at present, however, are necessa-

rily but little cultivated, and the belligerent forces destroy what is produced. The Sanitary Commission do a good work in supplying this deficiency from the rich fields of the West. The onion patches of Wisconsin, the potato fields of Indiana and Illinois, contribute largely, through the Commission. Here I must express my opinion on the value of the preparation called desiccated vegetables, so common in the army (an Eastern production, I believe). They are, in my estimation, when *properly cooked*, a most excellent substitute for the fresh article.

"Surgeon J. H. Boucher, U.S.V., is the Medical Director of the Corps (17th, McPherson's); but being temporarily absent with the expedition, Asst. Surg. C. D. Davis, 17th Wisconsin Vols., acts in his place. Brig. Gen. McArthur is Commander of the post.

"Asst. Surgeon Ridgely, U.S.A., has turned over the Purveyor's office to Dr. Morrison."

The health of the city itself has been attended to by Surgeon Churchman, U.S.V., who was appointed to the position of "Health Officer" shortly after the surrender. The chaos of unhealthiness, in which Dr. C. found the city, was soon reduced to order and cleanliness. The sick and dying negroes were removed to hospitals outside of the town; the dead mules and other animals were buried or thrown into the river; the streets, lanes, alleys, cellars, and garrets were carefully and vigorously policed, and due attention was paid to the health of the citizens in every respect. A very few of the physicians remained and practised their profession as before. Dr. C. is energetic and efficient, and performs his duties conscientiously. He is one of the few who had left the slave States (Virginia) before the war, from feelings of repugnance to the "peculiar institution."

Dr. Powell is well known throughout the country as a contributor to a medical journal in Chicago, and as a teacher, formerly, in the "Rush Medical College" of that city. My impressions, from the intercourse I had with all these gentlemen, are pleasant and lasting; and I shall long remember the laborious and exhausting service which we performed together, before, during, and after the siege. Long live our faithful comrades of Vicksburg—and let me ask in conclusion, why have not some of them been promoted to higher stations, with the Generals and other military officers?

Yours, etc.,

JAMES BRYAN, *Surgeon U.S. Vols.*

141 MONTAGUE STREET, BROOKLYN.
Feb. 27, 1864.

ADVERTISING BY SPECIALISTS.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—In the "London Lancet," for March 12th, I find the following editorial on the subject of "*Advertising Specialties*," which seems at this time to be exceedingly opportune. "The question of 'Specialties' has nearly found its level in this country, and has been settled, by admitting them in the bosom of hospitals and centres of instruction, where they can serve purposes of education and progress, within salutary limits, and subject to the regulations of the general body. Left to themselves, they grow rank, and overrun the place in lawless outgrowths. In America, the professors of specialties have adopted the fashion of advertising. There we read, that 'Dr. —, Lecturer in — College, devotes his time to the treatment of diseases of — and neighbouring organs; office hours — to —,' which announcement, with others similar to it, appears in large capitals in the advertising columns of the principal weekly periodicals of America. Here, in Great Britain, there could not be any difference of opinion about the exceedingly gross impropriety of such a proceeding, however various standards rule in different countries; and possibly the American profession may find as much reason to wonder at irregularities that we tolerate, as we do at the lax procedures which their professional code admits." The editor then proceeds to comment upon the resolu-

tions recently adopted by the New York County Medical and the State Society on this subject, which resolutions he publishes at length. He concludes in this wise: "Thus, the specialists receive a check; but the admission is made that advertisements, indicating *location* and *residence*, are consistent with professional dignity; a proposition which it seems to be difficult to maintain, and which would be assuredly rejected with unanimity by any English society. So far as the resolutions go, they are of good effect; but we could desire, in the common interest of *professional dignity*, that they should go farther."

"MENS CONSCIA RECTI."

Army Medical Intelligence.

ORDERS, CHANGES, &c.

Surgeon J. S. Bobbs, U.S.V., now on duty at Indianapolis, Ind., will report by letter to the Provost Marshal-General, U.S.A., for duty as a member of a Board to be convened in that city, for the examination of applicants for commissions and commissioned Officers already in the Invalid Corps.

Surgeon R. H. Gilbert, U.S.V., is relieved from duty in the Department of the Susquehanna, and will report in person without delay to the Commanding General, Army of the Cumberland, for assignment to duty.

Surgeon David J. McKibbin, U.S.V., is relieved from duty in the Army of the Cumberland, and will report in person without delay to the Commanding General, Department of the Susquehanna, for assignment to duty.

Assistant-Surgeon James Uglov, 43d New York Vols., is honorably discharged the service of the United States, to date January 30, 1864, he having accepted an appointment as Surgeon 26th U. S. Colored Troops.

Surgeon Alexander J. Mullen, 35th Indiana Vols., having tendered his resignation, is honorably discharged the service of the United States, with condition that he shall receive no final payments until he has satisfied the Pay Department that he is not indebted to the Government.

The Board of Examination convened at Convalescent Camp, near Alexandria, Va., by virtue of Special Orders No. 7, from the War Department, current series, having concluded the duties for which it was organized, is dissolved, and the Officers named therein will report to the Provost-Marshal-General for instructions.

Surgeon Clayton A. Cawgill, U.S.V., has been assigned to, and is performing the duties of Acting Medical Inspector, District of North Carolina.

In addition to his duties as Attending Surgeon, Battery E, 2d U. S. Artillery, Assistant-Surgeon E. Freeman, U.S.V., has been assigned to the Franklin House Hospital, Knoxville, Tenn.

Surgeon J. B. Morrison, U.S.V., is on twenty days' leave in Lancaster Co., Penn.

Surgeon J. W. Lawton, U.S.V., has been assigned to duty in charge of Convalescent Camp, Nashville, Tenn., General Hospital No. 12, of which he was lately in charge, having been closed.

Surgeon C. N. Chamberlain, U.S.V., having reported for duty to the Commanding General, 1st Army Corps (Army of the Potomac), has been designated by him as Medical Inspector of that Corps.

Surgeon S. S. Mulford, U.S.V., has returned from leave, and resumed his duties on Folly Island, S. C., as Chief Medical Officer, Division commanded by Brigadier-General Gordon.

The leave of absence heretofore granted to Surgeon Murray Weidman, 2d Pennsylvania Cavalry, is extended ten days.

The resignation of Surgeon John T. Hodgen, U.S.V., has been accepted by the President, to take effect February 23, 1864.

So much of Special Orders No. 43, current series, from the War Department, as dismissed Surgeon J. R. Leal, 44th New York Vols., has been revoked, and he is restored to his command, provided the vacancy has not been filled, evidence of which must be obtained from the Governor.

Surgeon D. G. Brinton, U.S.V., is relieved from duty in the Army of the Cumberland, and will report in person without delay to Assistant Surgeon-General R. C. Wood, U.S.A., at Louisville, Ky., for assignment to duty in the Northern Department.

By direction of the President, Hospital Chaplain Thomas T. Devan, U.S.A., having been rendered supernumerary by the breaking up of the General Hospital at Fort Schuyler, N. Y., is honorably discharged the service of the United States, to date February 23, 1864.

Surgeon James Bryan, U.S.V., now waiting orders at Brooklyn, N. Y., will report in person without delay to Major-General Butler, U.S. Vols., Commanding Department of Virginia and North Carolina for assignment to duty.

Dr. Frank S. Dow, Private, Battery A, 1st Vermont Vols., and Dr. R. S. Halleck, of St. Louis, Mo., have been assigned Assist.-Surgeons in the U.S. Colored Troops.

Thomas H. Booz, of Maryland, R. H. Spencer, of New York, Charles Wachter, of Maryland, John Davis, of Massachusetts, W. C. Myers, of Pennsylvania, J. M. Aldrich, of Illinois, J. A. Seaton, of Illinois, J. M. Murray, of Missouri, W. H. Heistand, of Pennsylvania, James B. Newlin, and Charles Constantine, of Massachusetts, and Alberto Marchetti, of Washington, D.C., have been appointed Hospital Stewards in the U.S.A.

Assistant-Surgeon Samuel Hart, U.S.V., has been placed in charge of General Hospital No. 4, Munfreesboro, Tenn.

Surgeon S. B. Davis, U.S.A., has reported to Major-General Curtis, U.S.V., at Fort Leavenworth, Kansas.

Original Lectures.

LECTURES ON GUNSHOT INJURIES OF THE CHEST.

By FRANK H. HAMILTON, M.D.,

PROF. OF MILITARY SURGERY AND FRACTURES AT BELLEVUE HOSP. MED. COLLEGE, AND LONG ISLAND COLLEGE HOSPITAL; SURGEON TO BELLEVUE HOSPITAL; LATE MEDICAL INSPECTOR, U.S.A.

LECTURE IV.—PART III.

I PRESUME it happens in this way:—Occasionally the wound through the walls of the chest is oblique, or the muscles through which the missile has passed subsequently change their position, and thus a complete valve or diaphragm is formed, which effectually prevents the escape of air without, and turns it aside into the areolar tissue. It is observed, accordingly, that emphysema is much more likely to occur when the wound has been made through the larger muscles which cover the thorax, such as the pectoral, latissimus dorsi, the serratus major anticus, etc. It seldom occurs when the injury is received in portions of the chest less thickly covered; and it never occurs to any extent when the external wound is very large.

The symptoms which characterize traumatic emphysema are at first a very moderate and diffuse swelling in the vicinity of the wound, unaccompanied with pain or redness, but especially is it recognised by a peculiar crackling or crepitus when the finger is pressed gently upon the part. In most cases this emphysema is limited to the space of a few inches, and need cause no anxiety. Occasionally, however, it continues to extend, until the integuments in every part of the body, except the soles of the feet and the palms of the hands, are enormously distended, and all the original contour of the body is completely lost. Finally, the air may find its way into the mediastinal space, and even into the structure of the lungs, and cause death by actual suffocation. A very few such extreme examples have been recorded, but they are too rare to warrant a just apprehension of a similar result in any case. I have once, in a case of simple fracture, found the emphysema as low as the middle of the thighs, and involving the whole of the neck and head, with portions of the upper extremities, but there was no embarrassment in the respiration which could be properly traced to this cause. In all the other examples seen by me, the emphysema has not covered more than a few inches, or has at least not extended beyond the chest and lower part of the neck.

In no instance which has come under my notice has the emphysema demanded any treatment whatever. Ordinarily it has disappeared completely in from two to four weeks; and, in the case where the extravasation of air was most extensive, involving four fifths of the whole body, it disappeared in five or six weeks without either surgical or medical interference.

If, however, the symptoms become more alarming, it will be proper to enlarge the external opening, and to tap the integuments at various points of the body, and especially over those parts in which the pressure of the air is causing interference with vital functions.

Hernia of the lungs is a very rare accident, especially as the result of gunshot injuries. I have met with it once in the person of a soldier wounded at the battle of Fair Oaks. My attention was called to him the night after the second battle by one of the surgeons. He had been wounded by a ball on the left side of the thorax, I think a little below the nipple. The ball had not been found. He was lying upon the ground in a condition of considerable prostration. The hernia was about one inch in diameter, having escaped from an aperture which was very much smaller. It was completely strangulated, being quite black and insensible to the touch. We applied to the neck of the hernia a strong silk ligature, for the purpose of expediting its

destruction, and then made fast the ends of the ligature to the outer surface of the chest by adhesive plasters, to prevent the escape of the ligature within the cavity, in case the hernia should retire after it had sloughed. I saw this poor fellow the next morning lying in the same place. He had taken a little nourishment, such as we had to give him, and expressed himself as being comfortable, although he had lain without shelter two nights, and during each night he had been drenched with rain. In this respect he suffered, however, only in common with at least two thousand other wounded and dying men. Gentlemen, I must not omit this additional tribute to the bravery of these noble fellows. During all this time—and I was with them every moment both night and day—I never heard one cry of impatience or one murmur of complaint beyond that which was extorted by the agony of suffering.

When the wounded were sent down to the White House this boy was sent with them, and I have never seen or heard from him since.

There are two forms of hernia of the lungs: one occurring immediately or very soon after the accident, while the temporary wound is still open, and in which the protruded lung has no covering; the other being formed at a later period, after the external wound has cicatrized, and which is covered by fasciæ, integument, and pleura.

The first of these, namely, that which takes place immediately or soon after the accident, is caused by the contraction of the walls of the chest before the lung has collapsed. It is most likely to happen, therefore, immediately upon the receipt of the injury, and especially if at this moment the patient attempts to cough, preceding which act the glottis is closed, and the walls of the chest are firmly contracted upon the air contained in the bronchial tubes. Adhesions favor the occurrence of hernia, provided they are a little remote from the seat of the wound; and it is more likely to occur when there is a small wound than when the wound is large, for the reason that in the latter case the prompt admission of air into the pleural cavity causes the lung to recede. It is much more common, therefore, to meet with hernia of the lungs in bayonet and in other punctured wounds than in gunshot wounds. Its existence also generally implies that the structure of the lungs is not wounded, but not certainly. Malgaigne even thinks that it is just as likely to occur when the lung has collapsed. The vascularity of the lung is such that, when strangulated, it assumes speedily a dark purple color, and, possessing but little sensibility, its condition leads at once to a suspicion that it is actually dead, while its vitality may be only slightly impaired. Its death can only be affirmed when sensibility in the mass is completely lost, when its purple or brown color has changed to black or grey, and its tissue is softened by the commencement of the process of disintegration.

The occurrence of a hernia of the lung, accompanied with strangulation, may be regarded as a serious accident, since it is scarcely possible that the inflammation will not be propagated from this point to other portions of the lung; but on the other hand, if properly treated, the patient is by this accident made secure against a collapse of the lung, and he is in much less danger of pleuritis, and of the consequent pleuritic effusions.

If the hernia has just taken place, and there is no strangulation of any moment, no doubt the surgeon ought to attempt its reduction at once by the most gentle pressure; in which effort he might be aided, perhaps, by instructing the patient at the same moment to make a very full inspiration. If this fails, the opening should be carefully enlarged, using for this purpose a grooved director and a probe-pointed bistoury. It is scarcely possible for such herniæ to take place except when the muscular coverings are thin; and as it is in general only the fibres of the intercostal muscles which have to be severed, the surgeon will bear in mind their direction, so as to make their *debridement* complete. The delicacy of the structure with which

we have to deal, and the fact that the lung is in actual contact with the pleura-costalis at the point where the strangulation is to be relieved, exact on the part of the operator the greatest care and delicacy of procedure. It is far better that the strangulation should continue than that the lung should be returned after having been bruised and lacerated.

Guthrie says three cases were brought to him after the battle of Waterloo, and that, in pursuance of his advice, none of them were interfered with. Without stating the results more particularly, he declares that this proved "greatly to the advantage of the patients."

It would seem, however, if the hernia is to remain, and its separation by ulceration or sloughing is inevitable, that the more speedily this could be accomplished the better, and that, while it might be improper, owing to the vascularity of this tissue, to remove it by the knife, it would be eminently proper to destroy it at once and completely by the ligature, as was done in my own case. Yet I ought to say that Legonest and Guthrie recommend that it shall be left to take care of itself, only giving to it such protection as may be necessary to prevent its being irritated or chafed.

The second form of hernia is that which, occurring at a much later day after the accident, or without any previous wound of the parietes, is covered by integument, fasciæ, and pleura, and which seldom if ever becomes strangulated. Indeed this form of hernia, even more rare than the first named, and unattended usually with serious consequences, only deserves mention in order that the surgeon may be warned of the possibility of mistaking it for empyema. If a doubt exists, the diagnosis can always be easily made out by a resort to auscultation.

This secondary hernia is produced in most cases by a mere contusion of the walls of the chest, which has resulted after the lapse of several months in the almost complete absorption of the muscular parietes over the seat of injury.

Original Communications.

A NEW DISEASE?

By CHARLES A. LEE, M.D.

OF PEESKILL, N. Y.

It is not often that we are called upon to record the discovery of a new disease, or rather the recognition of one hitherto unknown to nosology. Our improved pathology, and the great advancement in diagnosis, by means of physical exploration, animal chemistry, and the microscope, has revealed certain forms of disease, during the last half century, hitherto unknown to the profession, and has added greatly to the success of practical medicine.

Our friend "Malakoff," the well known medical correspondent of the New York *Daily Times*, has recently communicated to that paper the following account of what is claimed to be a "new disease," or rather one not hitherto known to nosology:—

"The eminent Professor of Clinical Medicine at the School of Paris, Dr. Trousseau, has lately described, in a series of five lectures at the Hotel Dieu, a new and most interesting disease. That is to say, the disease is not a new one, but it now for the first time takes its nosological rank. After a long discussion between doctors, university men, philologists in general, and even Greeks, as to the etymology of the word most proper to characterize the malady, the Greek word *Aphasia* was adopted, but not until the various words *alalia*, *amnesia*, *aphemia*, *aphrasia*, and *anafidia*, had been passed in review and eliminated. This richness of the Greek language in synonyms furnishes to the reader a ready indication of the character of the disease. It is a more or less complete loss of the power of speech.

"M. Trousseau was not the first, in these series of lectures, to give the history of this singular and interesting affection; it had already been brought to the notice of the profession in a more summary way, and under other names, by other professors. But a sufficient number of examples have now been collected to entitle the disease to a place in classical works under a distinct head, and that head the school of Paris has decided shall be *aphasia*.

"In this malady there remains an integrity of the understanding and a normal condition of the vocal cords. Thus, while preserving all his mental aptitudes and all his intellectual wants, a man may be sequestered for weeks from his fellow-creatures, although living in the midst of them, and remaining in everything their equal, with the exception of the use of his tongue. Dr. Lordat, Professor at Montpellier, describes his own case. After a period of mental agitation and of strange nervous symptoms, accompanied by an access of tonsillitis (to which he was subject), he suddenly, although convalescing from his indisposition, found himself deprived of the power of speech. During the first weeks of the malady the patient had only lost the external part of the function of speech; the internal part, the thought and understanding, remained intact. He was capable of performing the same amount of mental labor as before his illness, in fact the mental and physical condition was completely restored, only he could not talk. But gradually, in losing the recollection of the signification of words pronounced, he lost also the recollection of their visible signs. Finally, syntax disappeared from the words; the alphabet remained, but the junction of letters for the formation of words had to be restudied. He was in despair at not being able to read the titles of his most familiar books without spelling them out. His despair, however, did not prevent him from smiling over the absurdity of French orthography. After a few weeks of profound melancholy he perceived one day, to his great joy, that he could read at a distance the titles of the books in his library. From this time forward memory and speech returned, but only fast enough to enable him to notice a change every fortnight. As in other cases, when he first commenced to speak, he confounded words, and for a while said invariably 'handkerchief' for 'book.' The recovery became finally complete. This occurred in 1842, and Dr. Lordat called the disease *atatie*, or *amnésie verbale*.

"Among the dozen authentic cases of *aphasia* on record, Dr. Trousseau related, at greater length than I can here give, the history of the following singular cases:—A lady at Boulogne, who was known for her volubility, and especially for her sharpness of language, was seized suddenly with *aphasia*. The circumstance was soon known throughout the city, and as she was detested by her servants and neighbors, her affliction was regarded as a punishment sent from Heaven. Her servants were rejoiced for she who had scolded and stormed so much was now reduced to the pronunciation of four words, and those four words, to add to the severity of her humiliation, were the most terrible oath in the French language: *S—n—de D*. No matter what she desired to say, even if it were something polite, nothing but these four terrible words could she get out of her mouth. So that at the end of a year or two she was known throughout the city by the sobriquet of *Madame S—n—de D*. During all the time she remained in perfect health, and conducted her affairs with the same intelligence as before her attack of *aphasia*.

"Another lady, during convalescence from an erysipelas of the face, attended with delirium and grave nervous symptoms, lost, to the great alarm of her friends, the power of speech. As her recovery advanced, however, she began to pronounce a few words, but these were always a repetition of those she heard. As, for example, when asked, 'Will you have a drink?' she replied: 'Will you have a drink?' Thus the sound of the words awakened in her mind the memory of the word heard, and in some sort opened up the furrows in which were concealed the terms of her natural tongue. A lady friend then commenced her

education, and by the system of association of ideas, that is to say, by giving her a word and making her study up all the words which this one recalled, she succeeded, by several months' patient labor, in re composing her language and her intelligence. This, however, M. Trousseau did not pronounce a case of pure *aphasia*, since there was here a delirium and a loss of intelligence.

"Of two men now in the wards of M. Trousseau, at the Hotel Dieu Hospital, both can pronounce a few words, but these words are not those they desire to pronounce. One of them thus far has been only able to say *couci, couci, ci*, while the other, when asked, 'How are you?' replies, 'Yes;' or 'How old are you?' replies, 'Mamma,' or, 'Do you suffer anywhere?' replies again 'Mamma.' Thus it is continually 'Yes,' or 'Mamma,' to all questions. When asked to write his name on a slate he wrote very well his name, 'Henri Denier,' but when asked to write his two familiar words 'Yes, Mamma,' he wrote again 'Henri Denier.'

"Other peculiarities not less striking than these were observed in the other cases related by Dr. Trousseau. In his conclusions he declared that the cases of *aphasia* pure, that is to say, cases in which there was loss of speech without appreciable lesion of the brain, were much more rare than those with lesion of the brain.

"A discussion is now going on as to the seat of this malady; a discussion which naturally brings up the interminable question as to the location in the brain of the function of speech. M. Broca contends, with a formidable array of evidence, that this function is located, not in the frontal portion of the brain, as generally supposed, but in the posterior part of the third convolution. M. Trousseau combats this theory."

A very remarkable case of loss of speech, connected with hemiplegia, recently came under our notice:—A Mr. G., a laboring man, very passionate and excitable, aged 35, had a violent altercation with one of his neighbors, which finally resulted in a regular fight. Both had been drinking to some extent, though not to intoxication. They had three or four set-to's, at intervals of several minutes—a sort of rough-and-tumble scramble; neither received any severe blows, but both were excited to the highest degree of passion. After it was over, Mr. G. immediately went for a magistrate to get his opponent committed, and spent two hours or more on this business. He afterwards walked over two miles to his residence. His wife noticed nothing unusual in his appearance, except a somewhat excited manner. He retired to bed at his usual hour; rose the next morning with headache, and was soon seized with a paralytic attack—hemiplegia of the right side—with *total loss of speech*.

On visiting him the third day after the attack, we found him perfectly rational; sight and hearing good; pupil of left eye larger than that of the right; power of motion of right arm and leg entirely gone; sensibility not much affected; *loss of speech, entire*. He evidently understood all that was said, and made an effort to answer all questions put to him. These symptoms gradually abated, and by the end of the third month he recovered the use of his arm and leg, and was able to do light work on his farm; but the loss of speech remained, though his mental faculties otherwise seemed perfect. As in the cases above selected, his mental and physical condition was pretty well restored, only he could not talk. At no time was there delirium, or loss of intelligence. At the end of about four months from the first attack he died suddenly in an apoplectic fit. As he was absent from home on a visit no post-mortem was made.

It is, perhaps, in vain to speculate in regard to the precise nature or locality of the cerebral lesion which caused the paralytic attack in this case. The ordinary symptoms of apoplexy were absent; there was no loss of consciousness or feeling, nor any suspension of the functions of the brain, nor were respiration and circulation affected. There was for a considerable time some difficulty in deglu-

tition and swallowing, but the tongue was not drawn to one side when protruded.

Dr. Copland has described a case of loss of speech in a professional gentleman, aged 50, who had for many months lost all power of muttering the most simple articulate sound, and who swallowed substances with the utmost difficulty, or not at all, unless they were conveyed over the base of the tongue. The tongue could not be protruded, and indeed was incapable of motion. The mouth, also, could be opened only imperfectly, but the sense of taste was not affected. He had neither headache nor any other ailment, and no other part was paralysed. He attended regularly to his profession during the usual hours of business, but was obliged to write down all he wished to say. The disease was ascribed to pressure or structural change at the origin or in the course of the lingual and glosso pharyngeal nerves; and the prognosis of suddenly fatal apoplexy was hazarded, which occurred some months after. The *new disease*, however, so called, seems unconnected with palsy, or necessarily any other disease. There are numerous cases on record where the power of using words has been impaired or lost by disease, when the ability to articulate and the powers of perception and judgment remained entire. In the large majority, if not in all these cases, the patient has been sooner or later carried off suddenly by apoplexy. Dr. Spurzheim records two such cases. Dr. Gall quotes two: one reported by Pinel, the other of a soldier sent to him by Baron Larrey. In the first, the patient had forgotten his own name, and that of his wife, children, and friends, although his tongue preserved all its mobility. He could no longer read or write, but nevertheless remembered objects which had formerly made an impression on his senses, and which related to his profession. He frequently pointed out with his finger the files which contained documents that could not be found, and indicated by other signs that he preserved the former train of his ideas entire. In the other case, "it was not his tongue," says Gall, "which was the source of his embarrassment, for he was able to move it with great agility, and to pronounce even a great number of isolated words. It was not his memory either which was in fault, for he showed evident dissatisfaction with himself upon many subjects which he wished to mention. The only faculty in him which was impaired, was that of speech." Three cases are given by Dr. Spurzheim, to prove that there is a special portion of the brain appropriated to the faculty of language, which he supposes expresses merely the feeling and conceptions formed by the various primitive faculties acting separately or in combination. The late Mr. Parrish, whose will gave rise to some very learned medical and legal discussions, seems to have lost almost entirely the power of articulate speech, while his general intelligence was believed to be impaired in a much less degree. We should hardly be willing, then, to say with Trousseau, that in these cases of *aphasia*, while the condition of the vocal cords remains normal, there is often complete integrity of the understanding, inasmuch as the loss of speech rarely occurs, according to his own acknowledgment, without appreciable lesion of the brain.

THE journals announce the death of M. Ribes, Professor of Hygiene at Montpellier.—*Brit. Med. Jour.*

THE LATE SIR B. BRODIE.—A new and complete edition of the works of the late Sir B. C. Brodie will shortly be published by the Messrs. Longman. It will be edited by Mr. Charles Hawkins.—*Dublin Med. Press.*

IN 1862, 19,545 soldiers of the Prussian army were vaccinated. Of these, 16,669 had cicatrices of former vaccinations; 1852 indistinct traces of cicatrices; and 1024 no trace at all. The vaccination was regular and normal in 12,272 soldiers; irregular in 2738; and unsuccessful in 4535.—*Brit. Med. Jour.*

REPORT OF
THREE CASES OF GUNSHOT WOUNDS
PUNCTURING THE ABDOMINAL CAVITY.

By C. S. WOOD, M.D.,

SURGEON U.S.V.

THE following cases, having come under my direct observation and care, are transmitted with as full particulars as possible, with the hope that they may be of service, at least in a statistical point of view, and in controverting the long-established doctrine that all cases of penetrating gunshot wounds of the abdomen are necessarily fatal.

CASE I.—Thomas Murphy, sergeant, 63d Regiment, N.Y.V., wounded at the battle of Gettysburg. Minié ball entered left iliac region, passing directly through abdominal cavity, emerging above crest of right ilium, about three inches from the spinal column. Saw him twenty-four hours after receiving the injury. Found him very prostrate; feeble pulse; cold, clammy skin; vomiting, etc., with fecal matter escaping from both orifices. He was placed in a comfortable position, with cold water applied to the openings, and the free administration of opiates and stimulants, all the while supposing the case would prove fatal in a few hours. Next morning more comfortable; stimulants withdrawn, as some reaction had taken place; beef-tea with full nourishment, and two grains opium every hour, which was almost the only remedy administered at varying intervals during a period of ten days. The bowels were not moved until after the ten days had expired, when an enema of oil and turpentine was given, after which he continued to improve as before, until the expiration of three weeks, when the anterior opening had closed by granulation, and from the posterior one nothing escaped but an occasional flatus. This, too, soon united. He was soon afterwards walking about; bowels had become regular, and there was every indication of a perfect recovery.

II.—Daniel Banta, Lieutenant, 66th Regiment, N.Y.V., wounded at battle of Gettysburg. Minié ball passed through fleshy part of right arm, just below shoulder, entering chest obliquely and laterally, passing across the body, but downwards and backwards, penetrating base of right lung, diaphragm, and intestines in its passage, and emerging on the left side, just below the false ribs, and about midway between spinal column and superior spinous process of the ilium. Had vomiting and involuntary fecal evacuations, the latter continuing several days. Sputa bloody and rust-colored, and fecal matter escaping through abdominal orifice; right arm paralysed from injury of the nerves by the ball, which paralysis remained to some extent for several months. Treatment. Perfect quiet, with large doses of opium or morphine, two grains of the former or one quarter of a grain of the latter every two hours. This treatment was continued for a period of two weeks, at the end of which time he was able to sit up a little in bed, after which his convalescence continued, although very slowly. Has since returned to his regiment, unable to do any duty, but enjoying a comfortable state of health.

III.—Lewis E. Mosely, Private, 61st Regiment, N.Y.V., wounded at battle of Gettysburg, by ball entering below the umbilicus, to the left of the linea alba, passing directly through the abdominal cavity, emerging posteriorly on the left of spinal column, accompanied by a profuse discharge of fecal matter from both openings, with the peculiar fecal odor. Symptoms: great prostration; feeble, fluttering pulse; cold, clammy sweat; cold extremities; constant faintings; with all the symptoms of immediately approaching dissolution. Opium and stimulants were freely administered, simply with a view to relieve his sufferings; under their influence he rallied slightly, and on the fourth day a natural fecal evacuation occurred, mixed with both fresh and coagulated blood. Peritonitis did not supervene; the wounds gradually closed by granulation, and on the thirteenth day he had sufficiently recovered to be removed to

the General Hospital at Baltimore. August 20th, the wounds are entirely closed; the patient is walking about, and considers himself well enough to resume his duties.

SACRAMENTO, CAL., Feb. 16, 1864.

CASE OF SPOTTED FEVER,

VEL CEREBRO-SPINAL MENINGITIS, AND AUTOPSY.

By A. P. WOODWARD, M.D.,

OF VERMONT.

HAVING noticed in some journal within a few months a request that some one would make a record of a post-mortem examination on a case of so-called spotted fever, I have been persuaded to send this to you. A disease is at this time prevailing to some extent in several sections of our country, and especially in New England, which, from its resemblance to the spotted fever of 1810, '11, '12, and '13, has received that name. Several cases have appeared in this vicinity, and in response to the above request I will send a report of a case which recently proved fatal in the town.

Bond, aged nineteen, American, healthy parents, himself supposed to have been so, occupation clerk, was attacked on the night of the twentieth of February with chills, which required considerable effort, by means of hot bricks and bottles of water, etc., to subdue. Throughout the twenty-first, complained of intense headache located in front, and a sharp pain in the lumbar region, lassitude, and a hot, dry skin, which alternated with a cold moisture. Great restlessness, the patient vibrating between the lounge, the bed, and a chair. About six o'clock p.m. a physician was called, who reports: "The patient somewhat flighty at this time, and prescribed a mild cathartic." At three o'clock a.m. of the twenty-second, the patient, becoming quite unmanageable from restlessness, I was requested to visit him. I found him upon a bed which, for convenience in restraining his movements, had been placed in the centre of the room. His face was flushed; pupils contracted; mouth closed; pulse 130. He now seemed more quiet; did not try to get from the bed in my presence; was stupid and indifferent to all questions addressed to him. It had been with considerable difficulty that the little medicine which he had taken was forced down.

I think sight was gone, as I made several attempts to ascertain if it existed, and was not able to satisfy myself that it did. There was no appearance of a rash of any description; I think there was less subsultus tendinum than I had witnessed before in similar cases; this was due perhaps to the comatose state. In the other cases that I have seen there was tendency to wakefulness, and a delirium and picking not unlike what is observed in delirium tremens. No opisthotonos, a phenomenon which I have once or twice observed. The treatment was necessarily confined to external applications, as it was next to an impossibility to make him swallow anything. Death occurred on the 24th, at nine o'clock p.m.

Thirteen hours after death.—Rigor mortis present; external surface of limbs mottled and dusky; on the back and neck a general, diffused, dark, sublivid color; calvarium and dura mater with some difficulty separated; turgescence of the vessels of the dura mater very limited, which was very different with the vessels of the arachnoid and pia mater, in both of which the vessels were greatly congested. Thick, firmly adherent masses of newly exuded plasma were pasted upon the surface of the left hemisphere, upon the anterior lobes (base), pituitary body, velum interpositum, and pineal gland. Sinus filled with serum and marked evidence of increased vascularity of the substance of the brain, especially at the centrum ovale majus.

Removing through the laminæ the posterior boundary of the vertebral foramen of the second and third dorsal ver-

tebræ, and exposing the dura mater of the cord, it was found externally normal. The arachnoid and pia mater were deeply injected, and here, as within the cranium, were to be seen masses of firmly adherent fibrin. No greater portion of the cord was examined than that specified above, because we believed that the complexion of the case would not be changed by knowing that the inflammation existed above and below the point examined, or had been limited to that spot alone.

Upon opening the thorax a very strong odor of garlic was perceived by all present. The only abnormal organ found was the heart; the left ventricle hypertrophied, and thrice its natural thickness.

No morbid changes were detected in the abdomen; the bowels were inflated with gas which existed before death.

In a few cases there is a frequent desire to urinate. I have only seen it in cases that had been blistered. Some patients are obliged to keep upon the right side. The rash, when it appears, usually arrives about the second day, and is not unlike the rose-colored rash of enteric fever. The majority of patients complain of intense pain in the anterior part of the head, and some of pain in the back alone or in connexion with headache. The attack may be sudden, the patient resorting to the bed early, and early delirium, or it may occupy many days, even a fortnight, the patient lounging about, complaining of headache.

When fully developed the head is usually the part complained of; sometimes, however, the pain is in the abdomen or limbs, in a toe or finger, and may migrate to distant parts. The pupil of the eye is usually dilated; the pulse is very variable, not only in frequency, but also in force and fulness, varying perceptibly often while your fingers are upon the artery.

The same variation may be noticed in the degree of heat and moisture observable upon the surface of the body and limbs. Bowels usually acted upon by cathartics, and often tympanitic.

This fever, whether analogous or not to the spotted fever of 1810, is certainly a nervous fever, as any one may satisfy himself by once beholding it.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, NOV. 25, 1863.

DR. H. B. SANDS, VICE-PRESIDENT, IN THE CHAIR.

CONDITION OF TIBIAL ARTERY IN STUMP.

DR. POST presented a small portion of the tibial artery removed from the stump presented at the last meeting; it was remarkable in being completely patulous to within only an eighth of an inch of its extremity. He also exhibited a couple of sequestra removed from the lower jaw of a child 2½ years of age. The necrosis was the result of a fall while playing with a clothes-pin. The specimens were only interesting as coming from a patient so young. One of the pieces was removed from the situation of the symphysis, the other from near the angle of the bone.

GUNSHOT WOUND OF THIGH.

DR. POST also presented the extremity of the right thigh of a woman whose limb he amputated last Friday. Twenty-five days before the amputation she was shot by the accidental discharge of a fowling-piece, containing a very small bullet, weighing about one-fourth of an ounce. The missile entered the outer aspect of the limb, about a hand's breadth above the knee, and took a course forwards and inwards, lodging in the limb. At the time Dr. Post first saw her, shortly after the accident, a portion of bullet, weighing ninety-five grains, and very much flattened and

disfigured, was removed through the opening. A fortnight later, when the amputation was performed, two additional pieces of lead were removed, weighing in the aggregate twenty grains. The fracture was found only to involve the outer half of the lower aspect of the thigh, causing an irregular and ragged opening into the cancellous structure of the bone. At the time of the amputation Dr. Post supposed that the fracture extended down to the articular extremity. One important motive for amputation was the existence of a bed sore, with sloughing over the sacrum.

GLANDULAR TUMORS.

DR. POST also presented a series of glandular tumors which he had removed that day from the neck of a young man 22 years of age. The main tumor was situated upon the left side, extending from the posterior part of the mastoid process along the line of the sterno-cleido mastoid muscle to the clavicle. Dr. P. had a suspicion, but not a very firm conviction, that the disease might be a mass of glandular tumors. This suspicion, as has been intimated, was confirmed. The tumor was freely movable in a lateral direction, but not so much so longitudinally, being bound down by the sterno-cleido mastoid muscle. The fibres of this muscle spread over the tumor, expanding to nearly the width of the neck. Some of its fibres had to be divided. The operation occupied over two hours. A series of tumors were removed, and some were left for subsequent operation.

DR. FINNELL referred to a similar operation for removal of glandular tumors, which he had performed some years ago. He first removed one tumor and then found a string of them along the line of, and behind the sterno-cleido mastoid muscle. He removed eleven in all, and still some were left. The operation occupied about an hour. The wound, however, never healed.

CRETACEOUS TUBERCLE.

DR. FINNELL presented, on behalf of Dr. Rockwell, of East Windsor, Conn., a small specimen of calcified tubercle of very large size, expectorated by a little girl, who, three weeks after, died of phthisis. The cretaceous deposit gave the indication for cure in one portion of the lung, while the softening of the deposit in another portion of the organ, with its attendant destruction of tissue, caused death.

FOREIGN CORRESPONDENCE.

LETTER FROM RUFUS KING BROWNE, M.D.

THE BERLIN SCHOOL OF PATHOLOGISTS AND THEORIES OF PATHOLOGY.

SEVERAL years ago* I brought to the attention of a certain circle of medical readers, a brief account of the views and observations of the Berlin School of Pathological Anatomists, as they are presented by Virchow in his Archives, and more compendiously in his Cellular Pathology.† Since then, what I expressed as conviction has become a certainty, so far as the testimony of one's eyes can constitute that event. Being here for some months, and during six of these frequently every day of the week engaged in the examination of morbid tissue, and finding fresh testimony daily of the correctness of the interpretations of this school, I am induced to think that your readers would value some account of it.

The Pathological Institute where these observations in pathological anatomy are incessantly carried on, headed by Virchow, is a part of the great "Charity Hospital" to which are conveyed for dissection and examination all the bodies of the dead who expire therein. This hospital contains some thousands of patients, and the quantity of exanimate material it furnishes to the pathologist is immense, of every variety, from the youngest foetus in utero to the very

* *Am. Med. Monthly.* Art I. Virchow's Pathological Views, August, 1861.

† Cellular Pathology, by Rudolph Virchow. Translated from the German by Frank Chance.

oldest of both sexes. In this particular it can hardly be exceeded by any similar seat of study in the world; but does not perhaps exceed that of Vienna, where I shall spend some months of this year.

It has a department of physiological chemistry. The branches that are taught in it are physiology, histology, and pathological anatomy. In any correct scheme of study, these, of course, run very much together, and ought to be inseparable. The Institute exists for the one purpose, which the study of all these equally promotes—viz. to ascertain the *true* character of animal tissues, normal or morbid, and the exact nature of the functions of those tissues. The means of research for the first is, of course, the microscope. Most, if not all, of the students are graduated physicians; but those in the department of microscopic anatomy (so far as there is any distinction in the departments) are men intent on the solution of scientific problems, inquirers in an advanced and advancing scientific stage. Some of them are men actively ambitious of ascertaining new facts which shall invalidate received ones, or enable them to explain the latter as errors. It is the distinction of the views accredited here that they are the fruits of the labor and research not of isolated observers, nor of occasional though successful research, but of a number of observers constantly in pursuit of one purpose—that already mentioned. Whatever is known to one is to the others; and most frequently one point, if it have any novelty, is the subject of various and general, though perhaps not formally *combined*, research. I do not imagine a better place of investigation in these respects.

(To be Continued.)

American Medical Times.

SATURDAY, APRIL 9, 1864.

SURGEONS IN CHARGE OF HOSPITALS AS MILITARY COMMANDERS.

THE question has again been mooted, "What is the position of a surgeon in charge of a military hospital?" and this time it has been decided in a civil court that he is a military commander. The case is that of *Bennet vs. Jewet*, tried before Judge Dutton, at New Haven, Conn. The defendant is surgeon in charge of a hospital in which plaintiff was a nurse; plaintiff having been guilty of disobedience of orders and other misconduct, was placed in the guard-house by defendant. "In the opinion of the Court the petitioner was under the military command of the defendant, and subject to military discipline by him. For disobedience of orders and disorderly conduct the defendant had a right to confine him in the guard-house. The Court, on this application, could not inquire into the mode or circumstances of that imprisonment. The enlistment in this case was in a form provided by the Secretary of War. The regulation of hospitals is undoubtedly subject to his control. It has been urged by the counsel for the petitioner that no law in Congress has been shown specially authorizing the enlistment in this form of nurses. No particular statute is deemed to be necessary. War must necessarily be attended with sickness and wounds, and the sick and wounded need and demand the first attention of a military commander. In a hospital strict rules are absolutely necessary for the preservation of life. It would be absurd to suppose that a nurse could refuse, at his own caprice, to aid in the amputation of a limb; or, for the

purpose of relieving himself from labor, leave a sick soldier to die from want of attention. In private life these offices may be safely left to the voluntary kindness of relatives and friends, but not in a hospital in time of war. The comfort, and even safety of the suffering, require the enjoyment of the highest military authority on the part of the surgeon. The Surgeon-General of the United States has, therefore, very properly approved this power, and communicated it to his subordinates."

If there is any position in which an army medical officer should have absolute rank, and the power consequent thereon, it is as the head of a hospital. He is here performing a class of duties of which no other officer, whatever his rank, has the slightest knowledge. He is truly "master of the situation," and every consideration of justice and humanity should accord to him the most absolute and unchallenged control. DR. SHRIMPTON thus forcibly states the question:—"Is it not an inevitable consequence, that, as the hospitals are specially destined for the reception and treatment of sick people, they should be under the direction and responsibility of the medical men? Such is the natural conviction of public opinion. But is not this direction, practically, a fiction, and this responsibility an injustice? Can nothing be done to remedy this state of things? Should not the medical men of the hospitals possess all *power* and *possible authority* to carry out the measures which their patients may require? It is a deplorable evil that, by the rules and regulations of the hospitals, the medical men should be deprived of this authority, or that their power should be in any degree weakened by the control of a non-scientific power. Medical men should have a hierarchy of their own in every hospital, to which alone they should be subject."

But notwithstanding the apparent justice and necessity of giving to the surgeon this entire control of the sick in hospital, his claims to be a military commander have heretofore been disregarded. The result has been the frequent occurrence of gross acts of cruelty to the sick, and serious controversies between the medical and line officers have resulted. In the war of the Revolution and of 1812, this evil was the subject of frequent remonstrance by the medical officers. SURGEON MANN, in his *Medical Sketches*, bears the following testimony to the injustice of military interference in hospital management in 1812:—"It was frequently the case, during the war, that commissioned officers of inferior grades intruded themselves into the hospitals without consulting the attending surgeons, and, without their knowledge, ordered out of the wards the convalescent men; and when detected in such unmilitary conduct, justified themselves by claims of superior rank. Officers commanding regiments who had been long in service were guilty of similar misdemeanors. Interferences of this description, at the commencement of the war, were extremely vexatious to the surgeons. In one instance, a Colonel ordered his Quartermaster to take possession of barracks already occupied by the sick, who, weak and infirm as they were, left their beds, and preferred to expose themselves without doors on the ground to being crowded and overrun by healthy, rude men."

The present war found the surgeon in charge of a hospital in the same subordinate position as previously; and we regret to state that officers of the line have occasionally exhibited the same disposition to ignore his rightful authori-

ty. The case of ASST.-SURG. WEBSTER, which we noticed a few weeks since, is an instance in point, and from the testimony on the trial of SURGEON SLOAN, the able and efficient Assist. Medical Director of the Department of the East, we learn that such interference is not infrequent. He said:—"It (military interference) had been the source of a great deal of trouble and controversy. It has sometimes counteracted regulations adopted by the Medical Department. All the General Hospitals in this department are governed by certain regulations and instructions. Interference with those regulations, without the knowledge of the Medical Director, has caused a great deal of trouble and annoyance." We might refer to many other cases, but we shall conclude with the following flagrant example of this interference in the western army.

In June, 1863, MAJOR-GENERAL GORDON GRANGER, then in command of the forces at Franklin, Tenn., ordered ASST.-SURGEON BLACK (belonging to one of the volunteer regiments) to visit Nashville, and go through the hospitals, in order that he might report to him what soldiers were detained in hospital unnecessarily. DR. BLACK performed this degrading service without informing the Medical Director at Nashville that he was about to do so, and made a report to GEN. GRANGER, who forwarded it to MAJOR-GEN. ROSECRANS with the following endorsement:—

"The especial attention of the Commanding General is respectfully called to the within report. Unless our men can be returned from hospital promptly I would suggest that the army be disbanded and placed in hospitals so as to give employment to the medical profession. It is impossible to prosecute the war successfully while this fire of would-be surgical commanders is carried on in our rear. Of all the departments of our army the hospital department needs purging most. This is the third report I have had the honor to make upon this important subject."

This report, with the accompanying endorsement, was forwarded to the COMMANDING GENERAL, ROSECRANS, and by him referred to his MEDICAL DIRECTOR to ascertain and report upon the facts. Subsequently the report of DR. BLACK, with GEN. GRANGER's endorsement, was handed to DR. F. H. HAMILTON, who was at that time Medical Inspector U.S.A., on duty in the Department of the Cumberland. After an investigation, he wrote a short note addressed to MAJOR-GEN. ROSECRANS, but, having read the note to the MEDICAL DIRECTOR of the Department, under advice, it was withheld. GEN. ROSECRANS was already sufficiently informed as to the facts by the report of the ASST.-MEDICAL DIRECTOR, and it seemed advisable at this crisis of an active campaign not to embarrass the commander by pressing upon his attention the consideration of matters of so little moment. The present, however, affords a proper occasion to reproduce this note, which eloquently vindicates the Medical Staff from the unjust aspersions contained in the endorsement:—

"I beg leave to unite with MAJOR-GENERAL GORDON GRANGER, in calling your especial attention to the following endorsement made by him upon a report of ASST.-SURGEON BLACK, who had been ordered by GEN. GRANGER, while the latter was in command of the forces at Franklin, Tenn., to visit the hospitals at Nashville, which order was obeyed and the report made without any communication with the ASST.-MEDICAL DIRECTOR of the Department, who is in charge of the hospitals at Nashville.

"As the Medical Inspector of this Department, whose

duty it is, among other things, to inquire into and report upon the character and conduct of medical officers, I have the honor to state that the ASST.-MEDICAL DIRECTOR of this post, SURGEON THURSTON, has carefully examined into the supposed causes of complaint referred to in the report of ASST.-SURGEON BLACK, and that in my opinion the facts do not justify any censure upon the medical officers in charge of the hospitals at Nashville. The report of the ASST.-MEDICAL DIRECTOR on this subject has been forwarded to you already, and you will decide for yourself how far these gentlemen deserve censure. It is certain, however, that nothing in ASST.-SURGEON BLACK's report will justify the language of the endorsement. In a manner which, I protest, is unbecoming an officer and a gentleman, the whole medical profession is assailed. It is insinuated that Surgeons desire that the hospitals should be filled in order that they may be retained in the service; that they have habitually withheld able-bodied men from their commands from base, mercenary motives; and to such an extent had this been practised as to have seriously embarrassed the successful prosecution of the war; that surgeons arrogate to themselves authority which neither written laws nor regulations authorize. Finally, that the hospital department exhibits more incompetency than any other department in the army.

"If you, Sir, think that there is any truth in these charges you will not fail, I trust, to institute at once a most searching investigation, which ought to result, if the charges are sustained, in a thorough purging of the Medical Staff under your command; but in the meantime I deem it my duty to say to you that, in my opinion, the medical gentlemen in this department are performing their duties with a zeal, fidelity, and intelligence which merits commendation better than reproof. The little authority which, for the purposes of humanity and the good of the service, has been vested in them, I believe they faithfully exercise, but no more; and it is impossible, in all cases, to determine the secret motives which actuate men in their lives and conduct; yet in view of the rank and pay which our government allows to its medical officers, coupled with the fact that they are the only class of officers in the army of whom previous education and examination with reference to fitness for the special duties which they are now performing have been uniformly required, it is fair to assume that, they are not only quite as competent, but also as little exposed to the influence of mercenary motives as any others."

We are not aware that any further action was taken in the matter by GEN. ROSECRANS; but it is stated that soon after several invalid soldiers were removed from the hospitals in obedience to orders issued by officers of the line; and that most of them were unfit to leave, and one had to be sent to his regiment on a bed.

But we trust and believe that these humiliating records of the abuse and misdirection of power belong to the past. We are making progress in the right direction, thanks to the enlightened and patient efforts of SURGEON-GENERAL HAMMOND in behalf of the Medical Staff of the army. Among the earliest measures of his administration which insured its adoption by Government was that which made the Surgeon in charge of a hospital a military commander. It was a long stride in advance, and secured to Surgeons a consideration which they never before enjoyed. In our review of the trial of ASST.-SURGEON WEBSTER we brought forward the evidence that the Surgeon in charge of a hospital is now recognised as a military commander, and we must be pardoned for referring again to that article. It is of the utmost importance that Surgeons firmly assert and unflinchingly maintain their authority, as was done by ASST.-SURGEON WEBSTER and SURGEON JEWETT.

THE WAR IN EUROPE.

FROM the medical writers at the seat of war in Europe we glean some interesting facts. Tetanus is quite common, eight soldiers having died of it in Schleswig. Pyæmia did not appear until there was an accumulation of severe injuries in the same wards. Wounds of the chest, in which the ball traversed its semi-circumference subcutaneously, were frequent. Such wounds were not noticed in the Italian war, and are now thought to be due to the difference in the size of the bullets; the rifle bullet of the Danes is of large diameter, and weighs nearly two ounces, while that used by the French and Austrians is but about half the size. The Germans have no regimental hospitals, but instead maintain field or general hospitals, consisting of several detached buildings under the management of one staff of officers. In the hospital under the charge of Dr. ESMARCH'S Assistant, the wounds are all dressed once only in twenty-four hours, all being thoroughly cleansed with a strong stream of warm water, by means of the irrigator. Where a ball has passed through a limb, the stream of water is made to traverse it, washing out all foreign materials. The wounds are usually dressed with oiled lint, and well covered up with cotton wool. Plaster-of-Paris is universally employed in compound fractures. Resection of hip, elbow, and shoulder were frequent, but amputations have been rarely practised. One surgeon neither amputates nor resects, being governed by the principles of a work which he has recently written. Several sword and bayonet wounds have already been seen.

"The care and transport of every material required for sanitary or hospital purposes in the field is intrusted to a body of men called the Sanitäts Compagnie, who are instructed in some points of minor surgery sufficient to enable them to assist the wounded from the field of battle to the place where the surgeons are to be found. It was matter of interest to observe the organization of this department of the Austrian army. Each waggon belonging to the department is entirely complete in itself, and is capable of furnishing bedding, dressings, and surgical appliances for 150 severely wounded, together with food, wine and spirits, and cooking apparatus, for the same number for twenty-four hours. The ambulance carriages are simple and practical, carrying each two severely or twelve slightly wounded."

CONFEDERATE SURGERY.

THE *London Lancet*, of March 5, contains a second instalment of the report from "General Military Hospital of Camp Winder, near Richmond, Va.," by Inspector A. J. SENMES, M.D., "Confederate States Army." There are nineteen cases of wounds of the extremities, twelve upper, seven lower; of the upper, seven involved the humeral region, one humerus and ulna, one radius and ulna, three hand. In the lower extremity, four involved the femur, upper third in two cases, middle one, lower one; one tibia, one tibia and fibula, one foot. Of the twelve cases of wounds of upper extremity, six died; of the seven wounds of the lower extremity, five died. Causes of death in the eleven fatal cases were as follows: Secondary hæmorrhage four, secondary hæmorrhage and scorbutus one, irritative fever one, pyæmia three, tetanus one, gangrene one. There were three resections of humerus, one at shoulder-joint with removal of four and a half inches of the shaft; two recovered and one died. In four cases of gunshot wound of knee-joint three were amputated, of which two died and one was slowly "healing;" one was treated by "position and

irrigation," and is "still doing well." There are two cases of wounds of arteries with secondary hæmorrhage, one femoral, in which the main trunk was ligated higher up the limb; no return of hæmorrhage, but patient died with symptoms of pyæmia on third day. Second case, wound of axillary in which the wound was successfully plugged. The detail of cases affords nothing of interest.

Reviews.

PROCEEDINGS OF THE AMERICAN PHARMACEUTICAL ASSOCIATION, AT ITS ELEVENTH ANNUAL MEETING, held in Baltimore, Md., September, 1863. Published by the Association. Pp. 321.

WE have always watched with interest the workings of this useful Association, and now welcome the appearance of the eleventh volume of its transactions, as evidence of the zeal and industry of its members, trusting that a brief summary of the work will be acceptable to our readers.

Following the minutes of the meeting, a considerable portion of the volume is occupied with a report of the Committee on the Progress of Pharmacy, presented by FERDINAND F. MAYER, Chairman. The report is lengthy, and exhibits a thorough acquaintance with American and European literature. Then follows a report of the Corresponding Secretary, J. M. MAISON, after which Dr. E. R. SQUIBB, in behalf of the Committee appointed for the purpose, presents a report on the Drug Market. After reviewing the sale and prices of goods, the Committee turns its attention to their quality, which we regret to say is not satisfactory. The specimens for examination "were purchased from the best usual sources of supply in the several cities; that is, those stores where cheap and inferior preparations were known to be sold were avoided, and only those from which the best class of pharmacutists and the best class of country physicians obtain their supplies were resorted to." Of the six specimens of æther examined, not one agreed with the standard in any two prominent qualities. Of the seven specimens of æther fortior, only two were right in all respects. Of the ten specimens of chloroform, five were so near the standard as to pass for good chloroform. Of the eleven specimens of sweet spirit of nitre, and eleven of compound spirit of ether, all were deficient in essential qualities. Of the eleven specimens of laudanum examined, not one yielded the proper amount of alkaloids. In view of these results the report says:—"From this exhibition of the character of six prominent representative preparations from the market of the class to which they belong, it appears that although not one of them comes fully up to the official standard, yet that, by a liberal admission, two of the most important ones may be considered to be nearly right, and to be progressing in the desired direction of becoming entirely right. The three important ones of the remaining four, however, exhibit a low character, discreditable alike to the professions of medicine and pharmacy, and to human nature in general; and those pharmacutists whose moral perceptions at this day are left keen enough to appreciate the condition of their art, and whose energy is sufficient, certainly have a most enviable reputation and standing within their reach, by opposing the condition of things thus indicated through what appears to be the rarely trodden path of moral rectitude."

Under the head of Special Reports and Essays, Mr. WILLIAM PROCTER, Jun., presents a paper "On the Relative Activity of American and European Aconite Root." A specimen of 5000 grains was selected from each, and both submitted to parallel experiments, when it was found that the aconitia from the European specimen weighed 10 grains, and that from the American 21 grains.

Mr. GEORGE C. CLOSE presents a report "On the compara-

tive Advantages of the Leaves and Seeds of *Conium Maculatum*." As the result of his experiments, we learn that from conium leaves one year old (American), no conia was obtained; that recent leaves are about three and a half times as rich as the English, and about one quarter the strength of the seeds. Recent seeds are about one per cent. stronger than those which are two years old, and fifteen per cent. stronger than German seeds. The proper time for gathering the seeds is when fully formed and retaining their green color.

PROF. JOHN M. MAISCHE presents a report "On the Specific Gravity of Aqueous Solutions of Tartaric Acid."

MR. P. W. BEDFORD reports "On the Comparative values of the Commercial Varieties of Buchu Leaves." There are three varieties, known as long, medium, and short. The long and short varieties were submitted to experiment, when it was found that the former yielded an average of 0.66 per cent. of volatile oil, and the latter of 1.21 per cent.

ROBERT P. THOMAS, M.D., Professor of Materia Medica in the Philadelphia College of Pharmacy, reports "On the Therapeutic Properties of Sanguinarina, and its Acetate and Sulphate." He commenced his experiments by taking, when in good health, pulse at 60, one-twentieth of a grain of the pure alkaloid at nine A.M., and at one, six, and ten P.M., daily, for seven successive days. After two days the pulse stood at 60 in the morning, and 52 or 53 in the evening. On the sixth and seventh days there was a little gastric discomfort. One-tenth of a grain taken four times a day, produced on the second day a feeling of warmth and uneasiness of the stomach, about half an hour after each dose. One-thirtieth of a grain was administered to a girl aged twelve, who had a hard, dry, racking cough; pulse 104. At the close of the fourth day the pulse had fallen to 88, but no very evident change in the cough. The sulphate, in doses of from one-tenth to one-sixth of a grain, generally reduced the pulse after the patient had taken it thirty-six or forty-eight hours. Larger doses produced nausea and vomiting. The acetate produced nearly the same gastric symptoms, with less effect on the pulse. As an expectorant, he recommends a syrup made of contused blood-root, $\frac{3}{4}$ j.; dilute acetic acid, Oj.; sugar, lbs. ij.; exhaust the root by percolation; add sugar; dissolve by a gentle heat. Prescribe with an equal quantity of syrup of Tolu.

MR. WILLIAM PROCTER, JR., reports on Fluid Extracts. The constantly increasing demand for this useful class of preparations has made its study an important one to the pharmacist; and this report shows that the subject is receiving careful attention. The great desideratum is, to be able to select for each drug its proper solvent, or one that will secure the medicinal constituents, to the exclusion of those that are inert. Mr. P. mentions the solvent and antiseptic properties of glycerine, especially its "solvent power for insoluble or altered tannin, as it exists in kino, catechu, krameria, and cinchona;" also of "acetic acid for the vegetable alkalies; alkaline solutions for the active resins of jalap, scammony, etc. In this direction much has yet to be learned of the effects of alkalies in modifying the therapeutic properties of these remedies." Other interesting reports on the various subjects relating to pharmacy are presented, but our space will not allow of a more extended notice. The book is got up in its usual form, with a good quality of paper, and a fair readable type.

THE MUNICIPAL HOSPITAL, PHILA.—The erection of a Municipal Hospital in this city for contagious diseases, under the commission composed of representatives from the Board of Health, Guardians of the Poor and of the Prison, is now progressing. This hospital is placed upon Hart Lane, near the Lamb Tavern, in the Twenty-first Ward. It will be a very handsome, convenient, and suitable building, and will be completed during the present year, at a cost of less than fifty thousand dollars.—*Reporter*.

Correspondence.

A NEW APPLICATION OF ELECTRICITY.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—The utilization of this mysterious principle continues to occupy the earnest thoughts of subtle and ingenious minds. The discovery of its relationship to magnetism astonished the world scarcely less than that of its identity with lightning; and its application to telegraphy, the most valuable of all, seemed to put the climax to its utility. But new modes of making it subservient to the business and comforts of man are still sought for, and one which was incidentally brought to our attention during a recent visit to Philadelphia, so struck our fancy by its beauty, usefulness, and convenience, that we were induced to pay a visit to the establishment where the idea found development and practice, and where, although a stranger, we found a welcome, and were politely shown the whole matter.

For two years past Mr. Robert Cornelius of that city (the head of the large establishment of Cornelius and Baker) has been devoting his time to perfecting an arrangement for lighting gas as it issues from the ordinary bracket or chandelier, by the electric spark. The method of accomplishing this was apparent to his mind very early, but to bring the apparatus to such perfection as to insure its certain operation at all times and seasons, and under all circumstances and conditions of the weather, was the nice point upon which he has labored with great assiduity and ingenuity, until he has accomplished the desideratum in a manner which may be regarded as nearly, if not quite, infallible. The little apparatus for the purpose forms an additional ornament to each gas bracket or chandelier, and is ever ready for action, so that matches and torches may be wholly dispensed with, wherever it is introduced.

By a very gentle friction of two surfaces, a delicate spark of electricity is generated at the moment of the escape of the gas from the burner, which is instantly ignited. The apparatus consists, in the case of an ordinary bracket, of a small brass conical cup, with an inside lining of lamb's wool and silk, into which is loosely fitted a plug of hard rubber, surmounted by a knob or handle. The slight friction caused by simply lifting this plug from its bed in the cup, generates electricity sufficient for the purpose. This is conducted by a delicate copper chain or wire, covered with silk, to the orifice of the burner, where it is discharged from a platinum point through the jet of gas, and instantly ignites it.

Nothing can be more simple and beautiful, while the cup and chain are a decidedly ornamental addition to the bracket.

In the case of a chandelier with five burners, which we saw, the positive and negative surfaces were arranged in the form of circular disks, about six inches in diameter, lying horizontally in contact with each other. The act of separating these, by slightly raising the upper one, produces a spark which is transmitted to each burner by a separate conductor, and ignites all the jets of gas simultaneously. This action of separating the disks, as well as the "letting on" of the current of gas, is performed by a very neat and ingenious contrivance, a single movement of a stopper being sufficient. It is so arranged also that any one of the five jets may be ignited independently of the others.

From the day when Franklin "eripuit cœlo fulmen," to that when Morse united the ends of the earth in an instantaneous bond, scarcely has there been seen a more pleasing and beautiful adaptation of electricity to human comfort and convenience. Though not yet introduced to the business public, permission was accorded us to present it to the readers of the MEDICAL TIMES, and though our description, without a drawing, must necessarily be imperfect, we

trust it is sufficiently clear as regards the principle of its operation. In our judgment this beautiful invention, which will be regarded as a philosophic toy, as well as a household convenience, will soon be esteemed as indispensable as the sewing machine.

The glory of the friction match will then be dimmed, as surely as it extinguished that of the flint and steel and tinder-box. With sulphur and phosphorus dispensed with in our households, we shall hear no more of children mistaking matches for candies, and dying in consequences. All honor, we say, to the philosophic and patient genius of the American artist.

G.

"MILES ON GUNSHOT FRACTURES OF THE KNEE-JOINT."

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—In looking over the AMERICAN MEDICAL TIMES for January 30, 1864, I was attracted by an article bearing the above title. Its extraordinary similarity in style and matter to Prof. Longmore's Essay in *Holmes's System of Surgery*, led me to institute a comparison. I offer the result of my labor in the two columns subjoined, as a contribution to those remarkable coincidences which sometimes occur in medical as in general literature. The same writer—*Act. Asst. Surgeon B. B. MILES, U.S.A.*—in preparing an article on *Erysipelas*, published about one year ago in the "TIMES," was so unfortunate as to happen upon the same modes of expression and manner of treating his subject—the very words, indeed—which Dr. R. B. Todd had previously used in his lectures upon "Acute Diseases." These singular coincidences might be construed by uncharitable readers in a manner extremely unfavorable to Dr. Miles, seeing that Prof. Longmore and Dr. Todd have the precedence in point of time. Without assuming to decide the question of plagiarism, I place some extracts from Dr. Miles's article by the side of portions of Longmore's Essay, so that the reader may form his own conclusions.

*Miles, in
American Medical Times.*

These injuries, always numerous in warfare, offer many subjects for the consideration of the military surgeon. No class of wounds includes so many cases that fall under his prolonged care.

As a general rule, primary amputation should never follow ordinary fractures below the knee-joint, from rifle balls; and in gunshot fractures of the thigh in the upper third, the danger attending amputation is so great that the question is open for discussion, whether it is safe to endeavor to save the limb or to amputate.

During the Crimean war particular attention was directed to this question, and it was generally conceded that the advanced experience in conservative sur-

*Longmore, in
Holmes's System of Surgery.*

These injuries, always very numerous in warfare, offer many subjects of consideration for the military surgeon. No class of wounds includes so many cases that fall under his prolonged care as this. (Page 73.)

As a general rule, ordinary fractures below the knee from rifle balls should never cause primary amputation. (Page 78.)

For in these (gunshot fractures of thigh in upper third,) the danger attending amputation itself is so great, that the question is still open, whether the safety of the patient is best consulted by excision of the injured portion of the femur, by simple removal of detached fragments, and trusting to natural efforts for union, or by resorting to amputation. (Page 78.)

Attention was specially directed in the late *Crimean Campaign* to the question of the proper treatment of these injuries, and expectations were generally held that the

gery would lead to many such cases, terminating favorably with preservation of the limb, which would previously have been amputated.

In the surgical history of the Crimean War we learn that 14 out of 174 cases of compound fracture of the femur among the men, and 5 cases out of 20 among the officers, recovered, and those were selected cases for the experiment of preserving the limb intact. Amputations of the thigh were very fatal in their results, the recoveries of the men being in the upper third 43.3 per cent. of all treated. Among the officers it was more favorable. In considering the results of gunshot fractures of the femur, the situation of the injury is of vast importance in regard to the chances of recovery, either with or without amputation.

In the Surgical History of the Crimean War this fact is shown in the results of amputation; but there is no record of these cases without amputation. Dr. Macleod was able to discover only three cases of compound fracture of the upper third of the femur that recovered without amputation.

The femur is the most powerful and most compact in structure of all the long bones of the body, and when fractured, the lesion is generally rendered compound by the direct contact of the missile with the bone; but the fracture is sometimes simple, when caused by indirect projectiles, such as stones and spent balls.

I need not reproduce the article entire. The same similarity between Miles and Longmore exists throughout, except in one paragraph, which I doubt not equally resembles some other surgical writer.

advanced experience in conservative surgery would lead to many such cases, terminating favorably with preservation of the limb, which previously would have been subjected to amputation. (Page 78.)

Yet, in the *Surgical History of the Campaign*, it is stated that only 14 out of 174 cases of compound fracture of the femur among the men, and 5 out of 20 among the officers, recovered, without amputation being performed; that those selected for the experiment of preserving the limb, etc., Amputations of the thigh, however, were very fatal in their results also, the recoveries being stated to be, amongst the men in the upper third, 12 nine-tenths, in the middle third 40, in the lower third 43 three-tenths per cent., of cases treated. Among the officers the proportion was rather more favorable.

In considering the results of gunshot fractures of the femur, the situation of the injury is a matter of great importance, whether as regards chances of recovery, without or with amputation. (Pages 78, 79.)

In the Surgical History of the Crimean Campaign, this fact is shown in the results of amputation; but the distinction is not made in regard to recoveries without amputation. Dr. Macleod, in his *Notes*, remarks that he has only been able to discover three cases in which recovery followed a compound fracture in the upper third of the femur without amputation. (Page 79.)

The femur—the earliest formed, the longest, most powerful, and most compact in structure of all the long bones in the body—can only be shattered by a ball striking it with immense force. (Page 78.)

When complicated with fracture, the lesion is usually rendered compound by the direct contact of the projectile with the bone injured; but the fracture is sometimes simple, when caused by indirect projectiles, such as stones, or splinters, or spent balls. (Page 73.)

That these coincidences should have escaped your critical eye, Mr. Editor, can only be accounted for on the supposition that your confidence in medical officers serving in our general hospitals, forbids a too rigid scrutiny into their contributions to medical science.

R. B.

CHATTANOOGA, GA.

PHILADELPHIA.

Special Correspondence.

March 22, 1864.

THE schools are closed, the "grinders" have ceased for a time their valuable labors of cramming the foetal medical mind for the hour of parturition in the green-box, and, for a while, we breathe free again. The number of graduates at both the schools was much larger than could have been anticipated, and the Professors inform me that the candidates were fully as well prepared as could have been expected.

Since my last, we have lost another star from the horizon. Prof. Franklin Bache, who has for many years occupied the chair of Chemistry in the Jefferson, died March 19th. Prof. Bache was elected to this position April 6th, 1841, and has worthily filled it ever since. His death was unexpected, though he must have arrived at an advanced age, and his retirement had been repeatedly hinted at. This, with the death of Prof. Robt. P. Thomas, leaves two vacancies, for which a general rush will be made. In connexion with the latter (the Professorship of Materia Medica in the College of Pharmacy), several excellent names have been mentioned; it is thought Mr. Parrish, the author of Parrish's Pharmacy, will be the successful man. This school has been productive of a vast deal of good, by educating our apothecaries, so that much improvement is now observed among that useful profession, and some confidence can be felt that prescriptions will be properly compounded. Were our own profession true to themselves, and if they would refuse to recommend or patronize any but graduates in pharmacy, quackery would not be enabled to ride "rough-shod" over the profession. At present, in too many instances, the apothecary's store is a mart where can be obtained almost any fancy article, stationery, cigars, and tobacco, liquor under various disguises, patent medicines for every purpose under the sun, and a few drugs. In fact there is scarcely a druggist but is in the habit of prescribing over the counter, too frequently recommending his own wares in preference to the prescription which is brought for his compounding, and sometimes announcing a series of "cure-alls" which he calls his own, adding the title of "Doctor," without the slightest shade of a diploma, though one could be bought for a mere trifle, with all the "rights and privileges thereunto belonging."

At the last meeting of our County Medical Society, the subject of "Interference in Natural Labor" was discussed, Dr. Atkinson, the Secretary, opening the debate, followed by Drs. Bell, Nebinger, Atlee, of ovariectomy notoriety, and others. The use of instruments in cases of natural labor was condemned, and the whole subject very thoroughly ventilated. This is the last of the conversational meetings of this Association, and the campaign they have just gone through has been particularly successful; all the subjects debated were of special interest, and many of the most prominent physicians participated in the discussions. It is much to be regretted that these debates are not published, as much valuable matter is thus lost to the profession.

The College of Physicians has just issued a new edition of their Constitution and By-Laws, with an amended Fee Bill attached, which is a fine thing on paper. As a general rule, the fees are increased, and they have wisely adopted the plan of placing but one fee, the *maximum* (?), for each operation, etc. Formerly, for instance, the fee for a confinement was "from fifteen to thirty dollars;" now it is thirty dollars. Under the old plan, the courts of justice invariably awarded the lowest fee mentioned; now they have no alternative, and the maximum is obtained.

But how many of the Fellows of the College will adhere to this list of prices, even when the patient can afford it? We opine that the whole affair makes, in their estimation, a good appearance, and with that they are content.

Our military hospitals are models of cleanliness and good order. From all quarters they extort praise and admiration, and consequently are liberally supplied with delicacies, clothing, and other comforts, and even from some of that persuasion who regard the Union with undisguised horror. As a general rule, the surgeons are well prepared for the performance of their duties; and as a vigilant eye superintends the whole, any who are neglectful or incompetent, are speedily displaced by our excellent Medical Director. We have at present the South St. Hospital, an old silk factory, with about 250 beds; the Christian St., with a like number; the Filbert St., about 400; the West Philadelphia or Satterlee, accommodating 2500 patients; the Chestnut Hill, or Mower, about 3000; the Turner's Lane, the Nicetown and the Germantown Hospitals, each of much less proportions. Four of these were built as army hospitals, and are models of the kind, being splendidly ventilated, and supplied with every means to restore the health of the sick or wounded patriots who may be brought under their shelter. In addition, we have an Officers' hospital at Camac's Woods, where officers are furnished with hospital attendance at a reasonable rate.

Philadelphia will long be remembered for her humane institutions, but for none more than her military hospitals and other establishments for the comfort of the soldier.

Obituary.

DR. WEDERSTRANDT,

OF NEW ORLEANS.

THE example which a distinguished and good man bequeathes to mankind is, in some measure, compensatory for the loss which humanity sustains in his death. This sentiment dictates the following brief tribute to the memory of an eminent physician who has recently died in this city, far away from the field of his active professional labors.

Dr. JOHN P. C. WEDERSTRANDT was a native of Baltimore; his father was a Captain in the United States Navy, and a citizen of Louisiana. At an early age he was placed at Mount St. Mary's College, Emmitsburg, where he remained for nine years. He pursued the study of medicine in the office of Dr. Baker, a prominent physician in Baltimore, and he graduated at the Medical College in that city. After his graduation he spent three years in Europe, mostly in Paris, diligently pursuing his medical studies. Returning, he settled in New Orleans, and was soon appointed by the Governor of the State to the post of Resident Physician of the New Orleans Charity Hospital. He held this office, devoting to it all his time and energies, for nearly thirteen years. He resigned the position in 1852, and, from that time to the development of the disease which terminated his life, he was zealously engaged in the duties of a large and laborious practice. Early in the spring of 1863, symptoms denoted the existence of tuberculous disease of the lungs. He came to New York in April of that year; passed the following summer at the residence of a sister, at Islip; returned to the city late in the autumn, greatly prostrated by his disease, and died on the 9th of February, 1864.

Dr. WEDERSTRANDT entered upon his professional career with large wealth, which he had inherited. The temptation to ease and luxury, or to the acquisition of still greater wealth, had no influence upon him. During his residence for thirteen years in the Charity Hospital he lived in the wards and the dead-house. He became a proficient in morbid anatomy, a department of study in which he was deeply interested; but his attention was more especially devoted to the physical diagnosis of diseases of

the chest. He prosecuted this branch of practical medicine with great enthusiasm, and with such success that he became justly pre-eminent as an auscultator. After leaving the hospital, a large share of his practice involved the application of physical methods of examination, and his opinion in diseases of the chest was considered as the highest authority throughout Louisiana and the adjoining States.

As a practitioner, Dr. WEDERSTRANDT labored as few of those who depend upon their professional exertions for support, labor. Night and day were devoted to his patients, the rich and poor alike, and this was continued unremittingly, until his labors were arrested by disease. His was a striking example of an absorbing love of the profession; and his professional life appeared to be directed exclusively to two objects, viz. progressive general improvement, and the welfare of others. He was twice appointed to the position of a teacher in the University of Louisiana, once as Professor of Anatomy, and once as Lecturer on Diseases of the Chest. The duties of this position, however, were not congenial to him, owing to a diffidence which it was difficult to overcome; and, although his services were highly acceptable, he preferred to devote himself entirely to the practical exercise of his profession.

As a man, Dr. WEDERSTRANDT was singularly modest, retiring, and unaffected. A ripe scholar, a learned physician, a skilful practitioner, he preserved withal the guileless simplicity of childhood. In his relations with intimate friends he was peculiarly winning, and a spirit of kindly consideration marked his deportment towards his patients and all with whom he was brought into contact. It may be safely said he had no enemies; it would be difficult for any one to harbor bitterness of feeling towards such a man. He was respected and esteemed alike by the public and his professional brethren. After the act of secession from the Union of his native State, he was one of those who remained quietly but sincerely loyal to the Government; and when, after the capture of New Orleans, the Charity Hospital was found to be without a Board of Trustees, he was appointed by Gen. Butler to effect its reorganization—a duty which he satisfactorily performed.

It was the privilege of the writer of this imperfect memoir to visit Dr. WEDERSTRANDT frequently during his illness, up to the hour of his death. Appreciating fully the progress, in his own person, of the disease which he had studied so thoroughly in others, he was completely resigned to the will of God, although often expressing the wish that his life might be spared for future usefulness. In his gradual decline his interest in medicine was unabated; even within a few days of his death it continued to be a source of pleasure to converse on medical topics, and he often manifested as much enthusiasm as if he were at the threshold of his professional career. In the trying hour of his illness he was abundantly sustained by his Christian faith. He was never married, but all the attentions which affection could prompt during the march of his disease were rendered by two widowed sisters, to whom he was tenderly attached. These and an absent sister, with their children, are all that remain of his father's family.

The remains were taken to Baltimore for burial, the leading physicians of that city acting as pall-bearers. He died in the prime of life, his age being 49 years.

Thus, quoting from a tribute by another, "A sweet and most gentle nature has passed away, leaving behind naught but a record of kindness and charity to his fellow-creatures, and of long years of personal self-denial for their sake." *Requiescat in pace!* A. F.

JUNIOR ASSISTANTS TO BELLEVUE HOSPITAL.—The following gentlemen have been appointed junior assistants in Bellevue Hospital: J. W. SOUTHACK, JR., H. C. ENO, N. DE F. DAY, H. G. RIFFARD, E. G. JANEWAY, W. A. LOCKWOOD, EDWARD FARRELE, H. G. HARRISON, DARWIN EVEREST.

E. BROWN-SEQUARD arrived in this city in the Persia on Wednesday last.

Army Medical Intelligence.

ORDERS, CHANGES, &c.

Surgeon Henry A. Martin, U.S.V., has been relieved from duty as Chief Medical Officer, cities of Norfolk and Portsmouth, Va., and will proceed to Newbern, N. C., and report to Surgeon D. W. Hland, U.S.V., for duty in the District of North Carolina.

Surgeon B. B. Breed, U.S.V., has reported for duty at St. Louis, Mo., and been assigned to the charge of the Gratiot Street Military Prison Hospital in that city.

Surgeon H. B. Buck, U.S.V., has been relieved from the charge of the Military Prison Hospital, Camp Morton, Ind., and assigned to duty as Superintendent of Hospitals, Camp Butler, Ill.

Surgeon William Watson, U.S.V., having closed the Jackson Hospital at Memphis, Tenn., is, by order of Assistant Surgeon-General Wood, assigned to the Crittenden Hospital, Louisville, Ky.

Surgeon R. L. Stanford, U.S.V., has been relieved as Superintendent of Hospitals at Knoxville, Tenn., and has reported to Assistant Surgeon-General Wood, at Louisville, Ky., for duty.

Twenty days' leave of absence has been granted Surgeon T. Rush Spencer, U.S.V.

Surgeon L. C. Rice, U.S.V., has been assigned to duty in charge of the Hospital Transport, Charles McDougall, at Louisville, Ky.

Surgeon Charles O'Leary, U.S.V., to duty in charge of the General Hospital, Christian street, Philadelphia, Pa.

Surgeon James Bryan, U.S.V., has been relieved from operation of orders assigning him to the Department of Virginia and North Carolina, and will report in person without delay to the Commanding General, Department of the Monongahela, for assignment to duty.

Surgeon Bernard Beust, U.S.V., has been relieved from duty at Pittsburg, Pa., and will report in person without delay to Assistant Surgeon-General R. C. Wood, U.S.A., at Louisville, Ky., for assignment to duty.

Surgeon John F. Head, U.S.A., will relieve Surgeon W. Grinstead, U.S.V., in his duties at Cincinnati, Ohio. Surgeon Grinstead will report in person to Assistant Surgeon-General R. C. Wood, U.S.A., at Louisville, Ky., for assignment to duty.

Surgeon Gideon S. Palmer, U.S.V., has been relieved from duty in St. Louis, Mo., and will report to Assistant Surgeon-General Wood for duty.

Assistant-Surgeon C. J. Wilson, U.S.A., has been relieved from duty in the Department of Washington, and will report in person to the Commanding General, Army of the Potomac, for assignment to duty.

Hospital Steward Jacob Fensterer, U.S.A., has been transferred from New York to the Army of the Potomac.

Hospital Steward Samuel Haight from Louisville, Ky., to Paducah, Ky.

Hospital Stewards Bradford S. Thompson, from New York, and James H. D. Shaw and R. H. McCarthy, from Washington, D.C., to the District of Key West and Tortugas, Fla.

Surgeon William A. Banks, U.S.V., will report to the Commanding General, Department of Western Virginia, for duties with Batteries B and L, 5th Artillery.

Surgeon A. H. Hoff, U.S.V., has been assigned to duty as Medical Director of Transportation in New York city, relieving Surgeon J. C. Dalton, U.S.V.

Surgeon E. P. Morong, U.S.V., has relieved Assistant-Surgeon J. H. Frantz, U.S.A., as Medical Purveyor at Newbern, N. C.

Assistant-Surgeon Frantz has been assigned to the charge of the Balfour Hospital, Portsmouth, Va.

Surgeon John H. Phillips, U.S.V., to the 1st Division, Cumberland Hospital, Nashville, Tenn.

Assistant-Surgeon J. Sim Smith, U.S.A., to the 2d Division, 5th Army Corps, Army of the Potomac.

Assistant-Surgeon Edwin Freeman, U.S.V., to Columbus, Ohio, attending sick and wounded officers and examining recruits.

Surgeon George W. Hogchoom, U.S.V., to the District of South West Missouri, at Springfield, Mo., as Medical Director of the District.

Surgeon R. W. Pease, U.S.V., has returned from leave, and resumed his duties as Medical Director, Cavalry Corps, Army of the Potomac.

Surgeon F. V. Hayden, U.S.V., has arrived at Washington, D.C., and reported for duty in the Medical Inspector-General's Department.

Assistant-Surgeon W. W. Wythes, U.S.V., has arrived at Knoxville, Tenn., and been assigned to duty at General Hospital No. 4.

Surgeon C. F. H. Campbell, U.S.V., has been assigned to the charge of the Chesapeake Hospital, Fort Monroe, Va.

Assistant-Surgeon J. W. Applegate, U.S.V., to the charge of the General Field Hospital, Morris Island, S. C.

Surgeon S. W. Gross, U.S.V., to Jacksonville, Fla.

Surgeon G. F. French, U.S.V., to Huntsville, Ala., as Post Surgeon.

Surgeon Jabez Perkins, to the Chief of Cavalry, Army of the Cumberland, as Medical Inspector of his command.

Surgeon John T. Carpenter, U.S.V., has been relieved from duty at Cincinnati, Ohio, and ordered to report to Assistant Surgeon General Wood, at Louisville, Ky.

Assistant-Surgeon Bolivar Knickerhocker, U.S.A., has been relieved from duty at Philadelphia, Pa., and ordered to report to the Commanding General, Army of the Potomac.

Assistant-Surgeon S. A. Storrow, U.S.A., has been relieved from duty in the Army of the Potomac, and ordered to report to the Commanding General, Department of the Susquehanna.

Surgeon William S. King, U.S.A., has been relieved from duty as Medical Director, Department of the Ohio, and ordered to report to the Medical Director, Northern Department, for duty as Superintendent of Hospitals at Cincinnati, Ohio.

Assistant-Surgeon Harrison Allen, U.S.A., has been transferred from the Lincoln to the Carver General Hospital, Washington, D. C.

Assistant-Surgeon Cyrus Bacon, U.S.A., has been assigned to duty with the Invalid Corps, Camp Lafayette, Baltimore, Md.

Assistant-Surgeon Roberts Bartholow, U.S.A., has been assigned to duty as Medical Inspector and Assistant Medical Director, Army of the Cumberland.

Original Lectures.

LECTURES ON
GUNSHOT INJURIES OF THE CHEST.

By FRANK H. HAMILTON, M.D.,

PROF. OF MILITARY SURGERY AND FRACTURES AT BELLEVUE HOSP. MED.
COLLEGE, AND LONG ISLAND COLLEGE HOSPITAL; SURGEON
TO BELLEVUE HOSPITAL; LATE MEDICAL INSPECTOR,
U.S.A.

LECTURE V.—PART I.

PUNCTURED wounds of the heart are, like gunshot wounds of this organ, in most cases quickly fatal; but death as the result of these injuries is not generally quite so immediate, and a few examples are recorded of final and complete recovery. Admiral Villeneuve committed suicide by thrusting a long pin into his heart, and his death is said to have taken place almost immediately. Upon examination after death the surgeons could scarcely discover a trace of the wound. On the other hand it is well known that needles have been introduced into the hearts of animals by experimenters, and a current of galvanic electricity sent through them without doing any harm. Dr. Babington relates a case in which the patient survived a bayonet wound of the heart twenty-four hours. Dr. Featherstone reports an example of the same kind, in which death occurred after forty-eight hours. Mr. Guthrie examined the body of a man who had been wounded by a lance at the battle of Waterloo, and who died in consequence of an attack of pneumonia, in Nov., 1815. The lance had penetrated the left lung, the pericardium, the heart, the diaphragm, and the liver, all of which wounds had completely cicatrized. The wound in the heart was indicated by a sort of flap which hung down from the outer wall of the right ventricle, indicating that the weapon had not penetrated the entire thickness of the wall, but merely sliced off a small portion. Breschet mentions an example of laceration of the pericardium and slight wound of the heart, in which the patient survived twelve days. Dupuytren and Begin have each reported one example of complete recovery after punctured wounds of the heart.

ADDITIONAL CASES OF GUNSHOT INJURIES OF THE CHEST.

CASE I.—*Illustrating the serious consequences which may ensue from simple concussion of the Thorax, namely, hæmoptysis, pneumothorax, and empyema.*—Michael Macklynn, æt. 46, was struck by a shell on his back, at the battle of Gettysburg. The blow was received on the right side of the spinal column, between it and the base of the scapula. The skin was not broken, but a dark red discoloration remained. He was thrown down, and for a few moments was unconscious. Blood came from his mouth freely, and he continued to spit blood during two or three days. On the third day he experienced a good deal of pain in that side of the chest, and began to cough. These symptoms, no doubt, announced the accession of pleuritis. About three weeks from this time he suddenly felt as if something had given way in his back, the sensation being accompanied with pain and soreness. By the courtesy of Surgeon Clemens, U.S.A., in charge of the Central Park General Hosp., New York, I was permitted to examine this patient on the 13th of March, 1864, nearly nine months after the receipt of the injury. He was looking rather feeble; his cough was severe, and accompanied with a copious purulent expectoration. During the act of coughing, air, mingled with a fluid, could be heard rushing out through an opening in the back of his chest, and it could be seen to form a broad and slightly elevated tumefaction under the integument. It is probable that matter had formed in the right pleural cavity, and after having first penetrated into the bronchial tubes, it at length made its way through the pleura-costalis; in this direction it is gradually approaching the surface.

CASE II.—*Round musket ball turned aside by the ribs.*—George C. Flanders, 20th Mass. Vols., wounded at Antietam by a round ball, which entered the right side, just above the nipple, and passed out on the back near the inferior angle of the scapula, having made a circuit of one-fourth of the circumference of the thorax. This man came under my observation at Frederick city, Md., twenty-three days after the injury was received, and he informed me that he never expectorated blood, that he had had no cough, and in short that he had experienced only the most trivial inconvenience from the wound. The orifices were still discharging pus, but he seemed well.

CASE III.—*Round musket ball turned aside by the ribs.*—Norman Johnson, a private in the 1st Mich. Inf., received, on the 21st of July, 1861, a round ball upon the right side of his thorax, three inches below the centre of the clavicle, which, glancing off from the ribs, was found under the integuments, upon the anterior aspect of the arm, four inches below the acromion process. The ball having been removed by Surgeon Joseph R. Smith, at the Seminary Hospital, in Georgetown, I found him on the ninth day without any thoracic symptoms, and apparently doing well.

CASE IV.—*Slugs not penetrating the walls of the Chest.—Embarrassed respiration.*—On the 3d of Oct., 1862, Tony Rice, a private in the regiment called "Les Enfants Perdus," was shot near Yorktown, Va., by a gun loaded with small slugs, each of about the size of a buckshot. We counted seven wounds on various parts of his body, several of which were upon his chest. None of them had passed entirely through, and it was apparent that none of them had fairly entered the thoracic cavity. He had no bloody expectoration or cough, but at first and for several days he breathed with difficulty, owing, no doubt, to the injury inflicted upon the muscular parietes.

CASE V.—*Wound of the Lungs by round balls, without bloody expectoration.*—Wm. Lathrop, private, of the 12th N. Y. V., was wounded at the battle of Blackburn's Ford, July 18, 1861, by a round ball, which entered the outside of the left shoulder, and passing through the left lung, escaped upon the back on the right side of the spine. I saw him on the same day, and found him pale, suffering severely from the shock; the wound on his back was discharging a little blood of a light scarlet color, and air was passing in and out freely, but he had not yet expectorated any blood. The wound was dressed by Surgeon Palmer, U.S.V., with a compress of lint, wetted in cool water. On the 20th I saw this man again. His condition was considerably improved, a fair reaction having taken place, but up to this moment he had not expectorated blood.

CASE VI.—On the same occasion also I examined private Oakden, of the 12th N. Y. Inf., who had received a ball, probably a round ball, between the seventh and eighth ribs, and which remained within the cavity of the chest. In this case my attention was called also to the fact that he did not expectorate blood.

It will be noticed that in both of the above examples there were reasons to believe that the balls were round and smooth.

CASE VII.—*Perforating wound; musket ball; speedy recovery.*—A. W. Burnham, 2d N. H. Inf., wounded at Bull Run, July 21, 1861. The ball entered on the right side of the chest, in front, and passing through the lung was found under the integuments of the back. It was removed by his surgeon, and dressed with lint wetted with cool water. He expectorated blood freely immediately after the wound was received. This man, whom I saw in the hospital at Alexandria ten days after the battle, was doing well, and at the end of five weeks he was discharged cured.

CASE VIII.—*Pistol ball through the cavity of the Chest, and rapid recovery.*—Michael Shales was shot by a pistol ball on the 17th of April, 1855, the ball entering between the fifth and sixth ribs, a little to the right of the sternum, and passing out at a point directly opposite on the back. Soon after he was wounded he spat a very little blood, but there was no bloody expectoration after this. His

breathing was at first somewhat embarrassed, and he looked pale and alarmed. The wound was dressed with a compress wetted with cool water, and he was placed moderately under the influence of morphia. Very little inflammation of either the lungs or pleura followed; nor did any other accident delay his recovery. On the 1st of Sept., 1855, a little more than four months after the injury was received, he told me he was in the enjoyment of perfect health. Auscultation and percussion gave no indications that the lungs had suffered any lesion.

CASE VIII.—*Perforating wound of Lung followed by empyema.*—Melchior Breitel, private, 12th N.Y.V., was wounded at the battle of Chancellorsville, by a conical ball, which entered the lower lobe of the left lung, and was found beneath the integuments of the opposite side, having broken the seventh rib near the sternum, at the point of exit. Eight months afterwards I found the rib necrosed, and the wound still discharging pus. Several fragments of bone have escaped from time to time. His breathing is unembarrassed, and his general health is good.

CASE IX.—*Perforating gunshot wound resulting in empyema, etc., complicated with six additional wounds in various parts of the body.*—James Brownlee, a private in the 124th N.Y.V., 11th Corps d'Armée, was wounded at the battle of Gettysburg on the 1st of July, 1863. The wound in his chest was made probably by a conical ball, which entered the sternum about one inch below the top, and, passing downwards and outwards underneath the second, third, and fourth ribs, perforated the upper lobe of the right lung superficially, and escaped between the fourth and fifth ribs upon the same side, about three inches to the right of the nipple. The third and fourth ribs were broken, probably by the ball. In his opinion, however, they were broken when he fell. The bleeding from the wounds was free, but whenever they were closed blood flowed from the mouth. Three buckshot took effect above the pubes, some of which passed through the bladder. One ball entered the right thigh, and has never been removed or found. A conical ball entered the left thigh, and passing nearly through, was removed by a surgeon on the fourth day. A nearly spent conical ball struck upon the back of his sacrum, near its middle, and buried itself slightly beneath the skin, and was pulled out by himself immediately. This brave fellow received in all four balls and three buckshot. The wounds have all, with the exception of the chest wounds, healed completely, but the scars remain to confirm the accuracy of his statements.

In addition to all this, Brownlee affirms that he was finally struck on his back, the blow being received directly upon his knapsack, and knocked down, by a piece of railroad iron about eighteen inches in length, which was discharged from one of the enemy's guns. He says he saw the piece of iron as it was falling, and tried to escape from it, but did not succeed. Having been made a prisoner also very soon after, he observed that the railroad iron was taken up from the track, and, as he believes, for the purpose of breaking it into fragments to be used in the guns. I am also informed by a sergeant that at the battle of Chancellorsville he dug from the earth a piece of railroad iron which the enemy had thrown, and which, striking a rail fence, upon which an officer was sitting, knocked down both the rail and the officer, and then buried itself in the ground. My only purpose in mentioning this circumstance is to call attention to this new missile, if it is actually in use. After removing fragments of the sternum from the wound of exit, the wounds in his chest were closed by the Confederate surgeon into whose care he fell, by rolling up pledgets of lint and pushing them into the orifices—the pledgets being removed every hour or two. He observed that when the lint was removed he breathed with great difficulty, and that he experienced immediate relief when the pledgets were replaced.

This man has now, after the lapse of nine months, a copious purulent discharge from both orifices, and the walls of the thorax upon that side have already contracted con-

siderably. The posterior portion of the right lung admits air freely, nearly to its base. In front no auscultatory sounds are detected. When he stands erect the right shoulder falls considerably. Most of the time he has a troublesome diarrhoea, yet he is gradually gaining in strength and health, under the management of Dr. Stephen Smith, one of the surgeons attached to the Central Park General Hospital. Brownlee is now taking four quarts of milk, one pint of port wine, and two beef-steaks daily.

CASE X.—*Perforating wound of both sides of the Chest—Empyema—Probable recovery.*—John McIntyre was wounded at Bull Run, July 21 1861, by a round ball, which entered the left shoulder, and without emerging from beneath the skin, penetrated the chest, and was found by me on the right side of the spine, under the skin of the neck. I removed it from this point by a counter-incision, and having dressed it with lint and cool water, he subsequently found his way to Alexandria and Washington. His breathing was difficult at first, but never very greatly embarrassed; and on the 29th of July I found him at the hospital in Georgetown, with somewhat improved respiration, but the wounds were open and discharging, and his expectoration continued bloody. It is not probable that the ball opened fairly into more than one pleural cavity.

CASE XI.—*Gunshot wound of the Thorax resulting in empyema and death, after ten months.*—Lieut. Mulligan, a gallant young officer of the 21st N.Y.V., was wounded at Manassas, in August, 1862, the ball entering the thorax, over the middle of the clavicle, and emerging near the lower angle of the scapula upon the same side. In its course the ball fractured the first and fifth ribs, and the lower angle of the scapula. This brave boy lay upon the field seven days without receiving any surgical aid. He says he never expectorated blood, yet there can be no doubt, from the direction which the ball took, that the lungs were perforated. Empyema ensued, accompanied with a chronic diarrhoea, and after ten months of suffering he died. By request of his attending surgeon, Dr. J. R. Lathrop, of Buffalo, I saw young Mulligan in March, 1863, seven months after the receipt of the injury, and found him greatly emaciated, the pus discharging freely from the lower orifice, the upper orifice having been closed for some time.

Upon examination after death the lung was found collapsed, and firmly bound by adhesions to the anterior surface of the thoracic walls. The pleural cavity was empty, the matter having drained off freely when he was lying upon his back; most of the pleural surface was of a dark color; it contained no foreign matter except a few necrosed fragments of the first rib, which were projecting inwards, near the wound of entrance, and similar necrosed fragments from the fifth rib were found near the wound of exit. Portions of the intestinal tube were much contracted and thickened, as is usual after chronic diarrhoea; the liver was greatly enlarged, and its structure changed by fatty degeneration.

Although it would be improper to attribute the long persistent purulent secretion in this case entirely to the presence of the necrosed bone, yet it is apparent that these fragments were sources of irritation, and the history of the case cannot but impress upon us the importance of removing, by early and free incisions as far as possible, all the pieces of broken ribs, and especially at the point of entrance. When the patient was seen by me the upper orifice had closed, and the ribs had apparently united, so that we had no reason then to suspect the existence of necrosed bone in that vicinity. At this point it was, however, that the fragments were sent in, and were therefore most capable of doing harm. At the point of exit the necrosed fragments were very little displaced, and if they had been more, they could only have been thrown outwards, in which direction they would do much less mischief.

DR. SEMELEDER has been appointed physician to the future Emperor of Mexico.—*Brit. Med. Jour.*

Original Communications.

CASE OF AORTIC ANEURISM.

DEATH FROM LARYNGEAL SPASM, WITH REMARKS.

By AUSTIN FLINT, M.D.,

PROF. OF PRINCIPLES AND PRACTICE OF MEDICINE, BELLEVUE HOSPITAL MEDICAL COLLEGE, AND IN THE LONG ISLAND COLLEGE HOSPITAL.

DANIEL LAUGHLIN, aged 42, was admitted into the United States Army Hospital, Lexington Avenue, under charge of Surg. Alex. B. Mott, Dec. 8, 1863. He stated that he had been off duty for thirteen weeks, the chief subjects of complaint having been pain in the chest and difficulty of breathing. The latter had steadily increased; the patient, at the time of his admission, was much enfeebled, keeping the bed almost constantly. The difficulty of breathing was the most prominent symptom. It was paroxysmal and evidently due to laryngeal spasm. The paroxysms occurred frequently during the day, and still more so during the night. The fact that there was no permanent obstruction was shown by his ability to breathe freely when not in a paroxysm, and the presence of a well evolved vesicular murmur over both sides of the chest.

On examination of the chest, dulness on percussion was found over a circumscribed space on the right side of the sternum, at the second and third ribs. In this space a loud double murmur existed. A feeble impulse, without thrill, was perceived in the second intercostal space. There was no inequality of the radial or carotid pulse in the two sides. There was no congestion of the upper extremities and head. The pupils were equal. No difficulty of deglutition. The voice, except from the difficulty of controlling the breath in the paroxysms, was unaltered, that is, there was not aphonia nor huskiness. In view of these facts, the diagnosis was aneurism affecting the ascending portion of the aorta, and not interfering, by pressure, with the trachea, vena cava, œsophagus, or the sympathetic nerve, but giving rise to spasm of the glottis through the recurrent laryngeal nerve.

The paroxysms became more and more frequent and distressing. They were at length excited by the slightest exertion, such as getting up for evacuations, eating, or attempting to converse. The sufferings of the patient were extreme. He was obliged to sit up in bed during the whole night, and was constantly apprehensive of the paroxysms when not suffering from them. He obtained very little sleep, and was able to take but little nourishment. His strength progressively diminished, and he succumbed January 22d, forty-five days after the date of his admission into the hospital.

On examination after death, the aorta was found to be dilated from a point just above the semilunar valves to a point just below the arteria innominata. It was pretty uniformly dilated between these points, the width of the dilated vessel (not opened) being two and a half inches. This was the aneurism represented by the signs obtained by percussion and auscultation, which have been mentioned. The transverse portion of the arch presented nothing abnormal; but at the descending portion, commencing just below the left subclavian artery, was a sacculated aneurism projecting from the left aspect of this portion, and extending beyond the vertebral column for about two inches. The sac was closely attached to the vertebral column and the ribs, and on introducing the finger into it from below, the roughened exposed bony surface of the vertebra could be felt. The sac contained considerable dense fibrin and soft coagula. It measured transversely four and a half, and vertically three inches. The parts were removed *in situ* with a section of the vertebral column and ribs; the heart, vessels, and sac not being opened in order that they might be injected and prepared as a cabinet specimen. The volume of the heart was slightly enlarged. The lungs were healthy,

with the exception of the lower lobe and the inferior portion of the upper lobe of the left lung, which contain numerous small collections of crude tubercle apparently of recent deposit. The larynx and trachea presented no evidence of disease. The trachea and bronchi were not compressed.

The pneumogastric nerve, with the recurrent branch on each side, was examined with particular interest. On the right side these nerves were in no respect involved, and presented nothing abnormal. On the left side they were somewhat distended by passing around a portion of the aneurismal sac, but presented no appearance of atrophy or separation of fibres. But at the point where the recurrent separates from the main trunk, was an irregular calcareous body, with a rough exterior, about as large as a medium-sized bean. The recurrent nerve was situated between the aneurismal sac and this calcareous body, and the latter was closely united to the nerve, so that, on making the dissection, the two remained attached.

Other organs of the body were not examined.

Remarks.—The point of special interest and importance in the clinical history of this case, is the persistence of laryngeal spasm, the patient's life being destroyed mainly by the protracted suffering from embarrassed breathing, together with the loss of sleep and inanition. And the point of special interest and importance in the morbid appearances after death, pertains to the left recurrent laryngeal nerve. The situation of this nerve in relation to the aneurismal sac, and the calcareous body connected with it, affords an explanation of the laryngeal phenomena during life. The situation involved constant irritation of this nerve, from the impulse of the blood current in the aneurismal sac on one side, and the rough surface with which it was in contact on the other side.

It will be observed that the aneurismal dilatation of the ascending portion of the arch only was discovered during life. This did not interfere with the recurrent nerve. The large aneurismal sac was not ascertained, nor could the diagnosis of this be easily made out by physical signs. Had this aneurism existed alone, the positive evidence of aneurism would have been wanting; yet its existence should have been suspected from the laryngeal phenomena.

The case illustrates the importance of these phenomena as pointing to the probable existence of aneurism. It exemplifies the phenomena due to irritation of this nerve in contrast with the effects of compression, the latter being of more frequent occurrence in cases of aortic aneurism. The phenomena were those proceeding from spasm, whereas the usual effect of compression is paralysis, giving rise to aphonia, together with such embarrassment of breathing as depends on the loss or impairment of the respiratory movements of the glottis on one side. The case is of interest and importance in relation to a practical question, viz. the propriety of resorting to tracheotomy under similar circumstances. The propriety of the operation in the case repeatedly occurred to me, while I was a spectator of the great sufferings of the patient, but I did not propose its performance. As a result of the after reflections on the case, I cannot but think I should have proposed it, and, under similar circumstances again, I should do so. The patient's life would probably have been prolonged by the operation. This is, of course, a sufficient reason. But, aside from this reason, the sufferings would doubtless have been greatly mitigated, and, with a view simply to euthanasia, it seems to me now that the trachea should have been opened.

MEDICAL CONGRESS OF SPAIN.—The next meeting of this scientific association is fixed for Sept. 24th, and will continue in session six days. The following subjects are proposed for discussion: 1. Importance of Quarantines and Lazarettos; 2. Value of the Surgical Treatment of Cancer; 3. Causes of Pulmonary Phthisis, and the Means of Arresting its Ravages; 4. Criterion for judging of Moral Liberty in the Perpetration of Crime.

A FRENCH writer reports having cured peritonitis by the repeated application of collodion.

THE TRICHINÆ DISEASE IN GERMANY.

By RUFUS KING BROWNE, M.D.,
OF NEW YORK.

A CASE of trichinæ disease has very recently occurred here. Prof. Virchow yesterday showed me the varieties of meat for food—viz. the ham, sausage, and wurst, which contained the dangerous animals, and a piece of which I examined under the microscope. This disease has for several years engaged the attention of the medical men of Germany, and more recently has aroused the interest and concern of the German public. It arises from the penetration and lodgment in various parts of the living human body, particularly and finally in the muscles, of the young of that species of entozoa long known to microscopists as trichina spiralis, but reported by them to be sexless and harmless. The parent animal enters the body in the meat food, gives birth to its young in the intestines, whence they penetrate in countless numbers to the other various tissues and cavities of the body. There, when they cease to advance, they enlarge, become encapsuled, and cause an alarming succession of symptoms, which may or may not terminate in death. Very recently Prof. Virchow has caused to be published a sufficiently complete account of these animals from the time of their entering the human body. Several epidemics from this cause have occurred within a comparatively few years in Germany.

Prof. Virchow reviews the history of the investigations within the last ten years of a number of observers of the life of the animal, and the characteristics of its career. These were undertaken by some to expose its natural history merely, and by others with reference to the pathological consequences it caused in the living. He himself, with Leuchardt of Giessen, is chief of the latter. In 1860 he published in his Archiv an account of his experiments with them (consisting of his feeding the meat containing them to living animals under observation), which resulted in his ascertaining the main facts of the case. A year afterwards he communicated a fuller account of the same, and other investigations of his, to the Paris Academy of Sciences. The investigations of all those observers were many. By these, however, it has been ascertained that the older trichinæ infect the pig, being lodged in the lean flesh of that animal; that they reach the intestinal canal of the human body by having been consumed with the pork; there give birth to their brood. The trichinæ, then, first appear in the meat we consume, namely, that of the pig; and the infestation of the human body has as yet only been found to occur from consumption of the flesh of that animal. But there is no security from infestation by abstinence from pork, for the graminivora are not so perfectly select in the character of their food but that they may consume flesh; and if pieces of meat infested by trichinæ be placed in their mouths by hand, they will not reject but readily swallow it, thus becoming themselves infested as the meat was. Various herbivorous animals will do this. The worms are also found in other animals, usually regarded as strictly herbivorous, as moles, etc.; but special investigations have proved that these animals consume smaller animals, as field-mice, groundworms, etc.; and hence are flesh as well as grass-eaters, being in this respect like rats and mice, etc. Nevertheless, the only flesh man consumes which contains the trichinæ, is that of the pig.

Virchow cites from the Annals of Medical Jurisprudence, a number of instances wherein deaths having occurred abruptly without any appearance of the usual known causes, were made the subject of judicial inquiry. Though led to suspect poisoning, this was not proved; and the investigation being judicial, concluded by leaving this suspicion unimpaired but unproved. Chemistry, which, of course, was powerless to detect these animals by any analysis of the suspected food, and finding no known poison, suggested the idea of ham-fat poison—a hypothetical substance, supposed to arise from the retrograde transformation the fat underwent after entrance into the human body. Of course, in none of these instances investigated,

was the microscope used to find the trichinæ in the suspected flesh in the body of the dead, and thus to point out the cause of death. This was first done on the occurrence of several epidemics, in which a number of persons simultaneously fell sick and died, without at first any evident cause. These epidemics were groups of cases of this disease since the year 1859. They occurred at Plauen,* Calbe on Saale,† Quedlenburg, Burg near Magdeburg, Weimar, and Hettstadt near Eisleben, and other places. Other epidemics of the same character have occurred; but in these, unfortunately, there was no microscopic examination of the meat and the dead, as in the first series. Belonging to the first class was that of Hettstadt, in which 150 persons fell sick, and about twenty‡ died. In these latter the flesh, examined after death, was found by several microscopists literally filled with trichinæ§. In these also the meat—ham and sausage—was suspected. But in these cases the meat was consumed by them and their families and servants, who had raised, slaughtered, and prepared the animal for domestic consumption. In this instance, first, the flesh consumed, and second, that of those who died, were examined microscopically, and the colonies of trichinæ were found.

Virchow cites one striking instance, which exemplifies in the clinical experience of one person, the history of trichinæ disease from the time the subject of it first became so; and we were without any notion of the subject, except the suspicion of poisoning; down to the time when we had ascertained, by the microscope, the truth of the case. The person himself related his story, and it is one curiously interesting to even the least curious of readers. The case also exemplifies how, even though the infestation may have been so serious as to nearly prove fatal, it may end by the trichinæ becoming so closely confined by an adventitious shell, that they are powerless to do further injury to the patient, except what injury survives in chronic form they did before this entombment. This process, however, does not occur in less than three months; and in such a case the subject is cured. All cases examined up to the year 1860 were of this class, and hence arose and spread the erroneous impression, that the animal, even in the human body, was harmless. Last summer a person (the instance referred to) was being operated on by a noted surgeon of Berlin, for swelled neck. During the operation the bared muscles were seen to be filled with the characteristic shells or cysts of trichinæ, which can be recognised with the naked eye. The patient related, in reply to a question whether he had ever been very sick, that in the year 1815, with the other members of a commission for the inspection of schools, he ate a meal of ham, sausage, cheese, etc., at an inn. All who ate of these provisions were soon after taken sick, and, except the relator himself, died; suspicion fell on the innkeeper. A judicial investigation was held, but without result. Here the survivor might have gone to his death, and yet nothing have ever been known in his particular case of the infestation by trichinæ which had killed his six associates, although he survived, had it not been for the knowledge of the animal science had gained years after that fatal meat was eaten.

Virchow points out the more than mere probability, that all these cases of death, supposed to have been by ham poison, were due to the same cause as the above. In June, 1851, in the neighborhood of Hamburg, several well persons having eaten ham, fell sick. Three of them died, and others were long in a critical state. A judicial investigation was held without satisfaction. Ham-poison was supposed. Why? Not because anybody had ever seen or administered ham-poison. No; but because no explanation could be given, and hence supposition must arise. But it was afterwards shown that the symptoms and other cir-

* Böhler, The Trichinæ Disease and its Treatment in Plauen, in 1863.

† G. Simon, Prussian Medical Zeitung, 1862. No. 58 to 39.

‡ Behrens, Deutsche Klinik, 1863. No. xxx.

§ Up to the twenty-third of November, 137 cases of disease and 24 cases of death had occurred in this epidemic.

circumstances pertaining to the sickness and death of these people, was identical with those subsequently ascertained to be trichinæ infestation.

Again, the captain of a ship, at Valparaiso, from Hamburg, purchased a pig. It was slaughtered on the first of April by the cook. The crew ate thirty pounds of the fresh meat. While near Hamburg most of the crew fell sick, some lightly, some severely, and two died. In the muscles of one of the dead, numerous free living trichinæ were found.

The trichinæ, in order to infest the human body, must be eaten in meat; and it is, so far as we know, only through eating of pork that they enter the human body.

It is not the trichinæ which are eaten, that enter other parts of this body, but their descendants. While very young, these latter, which have penetrated the body, do not *propagate* these. They merely augment in size. If the body they have entered continues to be living until they are encysted, they do no further injury. They remain in a state of suspension or at least motionless animation, but if they are eaten and enter the intestinal canal of a human being, they are set free, and there produce numerous broods of young, which latter penetrate the intestinal walls; the parents remaining in the intestine.

The symptoms they cause are various, and vary with the condition or later stages of infestation. Sometimes they are irritation of the intestines (intestinal catarrh), gastric disturbances, weakness and stiffness of the muscular system; and sometimes pain, resembling gout or rheumatism, with febrile conditions, not particularly unlike those of typhus fever. Sometimes the train of symptoms is acute, and death occurs in a few weeks; sometimes the disease proceeds slowly with progressive emaciation, and loss of strength.

They have been found in great numbers in the bodies of persons supposed to have died of consumption, but in whose bodies autopsies disclosed no affection of the lungs. In these there was a great diminution of muscular substance.

There is no known remedy. Experiments have been made with a variety of substances, among them benzine; which Prof. Moseler,* of Giessen, found would kill the trichinæ. But to kill the trichinæ in the muscles of a human body is very doubtful. If their presence in the intestine, before the young have penetrated other parts of the body is suspected, purgation is, of course, the remedy.

Experiments showed that those animals, fed with trichinized meat, which were purged, survived; while others fed at the same time, not purged, soon died. They were expelled from the intestinal canal before the young entered the other parts of the body. The force of the symptoms, and hence the degree of danger in infected persons, will only be with the number of trichinæ which enter the body. There may either be so few that no alarming symptoms will arise; or so many that death is inevitable.

The degree of danger, therefore, to the human being who may have devoured the meat containing these parasites is least; should purging take place before the young trichinæ have penetrated the walls of the intestine, the danger ranges between two extremes: namely, whether they have eaten few or many. If the latter, then millions of young will penetrate the muscles; if the former, then not a sufficient number will have done so to cause alarming symptoms or endanger life.

If a piece of flesh containing the trichinæ be examined, or closely scrutinized by the naked eye, as microscopists are in the habit of doing, the ovoid, opaque shell, inclosing the animal, can be barely seen as a yellowish white granule; but the animal itself, which lies coiled within, a semi-transparent worm, is not at all seen in such a view. If the shell be carefully separated, however, from the flesh in which it is imbedded, placed upon

a slip of glass, and a drop of hydrochloric acid be added, the shell will slowly dissolve, and the animal become plain under a magnifying power of fifty or sixty degrees.

The only security, if pork is eaten without satisfactory microscopic examination, is to consume only that *thoroughly boiled*.

While I am writing this account, Prof. Virchow has called my attention to a case of trichinæ disease just brought to his notice, the history of which was in America as well as Germany. A physician of Davenport, Iowa, writes to him that a lady had long been afflicted with the symptoms now traced to infestation by trichinæ. She was a native of Holstein; emigrated to the United States. She recovered, except a disability to use her hands in piano-playing. She returned to Altoona (Holstein), and was there operated on for malignant tumor of the breast. When the muscles were bared by the scalpel, trichinæ cysts were found in them. She died of the malignant disease, but on autopsy her muscles were found filled with encysted trichinæ *still alive*. It must have been ten years since she had consumed the trichinæ-infested flesh.

PATHOLOGICAL INSTITUTION, Berlin, Prussia, March 1.

CASE OF

GUNSHOT INJURY OF THE HEAD.

By H. C. MAY, M.D., ACT. ASST.-SURGEON U.S.A.

THE following case of serious gunshot injury of the head is to me one of more than ordinary interest, and may influence others having similar injuries to treat, in their incipency, in determining their course of action.

William Sheridan, private, Co. M, 1st Missouri Artillery, detailed from regular U.S. Infantry, Irishman, thirty-four years of age, lymphatic temperament, five feet eight inches high, weight in health 160 pounds, of frail build, was wounded at the siege of Vicksburgh, May 19, 1863. While in the act of sighting a cannon, at a range of 200 yards from the enemy's works, a charge of canister was fired into the group working the Federal piece, killing three of his comrades, and wounding himself and another artilleryman. The concussion knocked him down, but he soon recovered himself, and walked two miles to the hospital in the rear, covered with blood, which flowed freely from a wound somewhere in his head. He was at once examined with a silver probe by several surgeons, who all said they readily defined the outlines and flattened surface of a large leaden bullet in the substance of the brain. The missile, judging from present appearance of cicatrix, had entered the cranium at a point immediately posterior to the coronal suture, on the left side, and about three inches from the median line or sagittal suture. It passed horizontally inwards, a distance of two and a half inches, as judged by the sensations of the patient on having the wound probed at time of injury, and his recollection of the statement of the surgeon who had him in charge.

Four days after receipt of wound, he was put on board a hospital boat, and taken to Van Buren General Hospital, on the opposite side of the river. During the passage to the hospital, the surgeon in charge of the boat put him under the influence of chloroform, enlarged the opening, and attempted to extract the ball, but failed. He remained at this hospital nine weeks, being able to walk about the whole time, taking his meals at the general table, dressing his own wounds with cold water and a light compress, suffering but little pain; no heat of head, and, with the exception of slight attacks of chills and fever in common with most of the other patients there, was in good general health. At the expiration of this time he returned to the battery, and engaged in light duty about the camp, until September 3, 1863, when he was discharged the service.

At the time, and for weeks previous to his discharge, the wound had suppurated freely, occasionally bled a little, and often small fragments of necrosed bone escaped. "Proud flesh" occasionally appeared, to which burnt alum

* Helminthologische Studien und Beobachtungen. Von Fred. Moseler, Professor in Giessen. Berlin, 1864.

was applied. The wound continued to discharge thus until November, since when it has never troubled him.

After his discharge from service he went to St. Louis, remaining there six weeks at leisure; meantime applied to Dr. Pope, at a city hospital, to have the ball removed, who at once discouraged the idea, citing to him the danger of the attempt, with which he was satisfied.

On the third of November he was employed by a Captain of the Commissary Department, and, with others, sent to this city, and placed at work on the levee. His duties were very heavy, that of lifting and loading boxes, barrels, sacks, etc., but with this he succeeded well, his head giving him but little trouble, except on the approach and continuance of a storm, when he had, and has yet at such periods, a dull pain and sensation of weight, referred to the locality of the ball in the frontal region of the brain.

Twenty days after his arrival in Nashville, he was attacked with fever, contracted by exposure, night work, and the severity of his duties; for which he was treated at Hospital No. 12, making a rapid recovery. On the discontinuance of that institution, he was transferred to this hospital, December 28th, and soon after came under my charge. He is convalescing satisfactorily, and is now able to walk long distances, eats and sleeps well, and makes little or no complaint of his head.

The wound of entrance, through the left parietal bone, is oval in shape, measuring one and one-fourth of an inch in length antero-posteriorly, and an inch through shorter diameter. The edges of the opening through the outer table and diploe are quite abrupt, and have the appearance of having been made with a punch and hammer, so regularly are they defined. The bottom is of bony hardness, apparently composed of several small, thin fragments of bone which have firmly united, and on a level with the under surface of the second plate of uninjured bone. The resulting external cavity or depression in the cranial wall is lined with scalp tissue and covered with fine rudimentary hairs, which are plentiful enough to conceal the injury from ordinary observation.

The prominent point of interest in this case, is the fact that a leaden missile, probably originally an ordinary round musket ball, first penetrated the cranial walls and meninges of the brain, and has lain buried in the brain substance for nearly nine months, without exciting inflammation, undue hæmorrhage, or in the least impairing mental action; thus vindicating that conservative surgery practised in his case, and which constantly inculcates the precept, to "let well enough alone."

HOSPITAL No. 1, Nashville, Tenn., Jan. 3, 1864.

A CASE OF THROMBI IN THE CARDIAC CAVITIES.

By JOHN H. PAGE, M.D., ACTING ASST.-SURG. U.S.A.,
FORT SCOTT, KAN.

PRIVATE GEORGE WASHINGTON (a Kaw Indian), Co. L, 9th Kansas Cavalry, age not known, probably about 30, was admitted to hospital Feb. 9, 1864. When admitted, patient was suffering with acute bronchitis, large and small crepitation being heard over both lungs, anteriorly and posteriorly; expectorated a large amount of yellowish green, translucent, somewhat viscid sputa. The sounds of the heart were very indistinct, with no pulse at the wrist or temples. Appetite good. Rested well until near the last of his illness. Bronchial symptoms continued, the sputa becoming more opaque and viscid, with increasing dyspnoea. On the day before he died the sounds of the heart could not be heard at the præcordia through a double ear-tube stethoscope, nor could I at any time locate the first and second sounds. Patient died Feb. 26, 1864.

Autopsy four hours after Death.—Thorax. Pleura thickened and inflamed, with firm adhesions at the lower lobes of both lungs. Three ounces of serum in the left pleural

cavity; small patches of red hepatization through both lungs; large and minute bronchi, filled with milky-looking fluid. The pericardium contained three-fourths of an ounce of serum; heart enlarged and flabby; right ventricle distended with clotted blood, and a large thrombus of a greyish color and firm consistency, adherent to, and interwoven with the muscoli pectinati, passing through the auriculo-ventricular opening into the ventricle, filling one-third of its cavity, and indigitating firmly with its fleshy columns. From this it passed into the artery. The walls of the right were much thinned and dilated. In the left ventricle a small thrombus was found, resembling that in the right cavities, but not so intimately connected with its fleshy columns. This extended into the aorta for more than twelve inches, gradually tapering to a point. At the arch it subdivided, passing into the vessels at that situation. The left ventricle was somewhat hypertrophied; liver of normal appearance; spleen dark blue, weight sixteen ounces; other abdominal viscera apparently healthy; brain not examined. Treatment was directed to the symptoms, and consisted in remedies to allay pain, counter-irritants, nourishing diet, and in the latter stage of the disease, stimulants and beef-tea. The presence of thrombi in cardiac cavities we have found to be quite common during the last five months; in making post-mortem examinations, we have found five hearts containing these morbid deposits, but in no other instance were they so large and firmly united to the cardiac walls as in the case described above. Yet in all, their formation prior to death was fully established to our minds. The large and harsh crepitation throughout the lungs may partially account for our inability to detect and locate the sounds of the heart; but this has no force when it is shown that the normal sounds could not be made.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, NOV. 23, 1863.

DR. H. B. SANDS, VICE-PRESIDENT, IN THE CHAIR.

(Continued from page 173.)

DIPHTHERIA.

DR. JACOBI presented a specimen from a case of diphtheria, and remarked:—This specimen was removed half an hour ago from a girl 8 years old. The child was sent home from school on the 6th of November, because she appeared to be sick. She coughed a little that same night, and a physician was sent for. The next day the child continued to cough, and loose diphtheritic patches showed themselves on the tonsils. There was no infiltration, neither any croupy cough. The next day the physician was able to remove the membrane. The fever had not increased, but the cough was more of a croupy character. This was on Sunday, and from that time the symptoms increased until Tuesday. The physician proposed tracheotomy, which I performed on Wednesday in the usual manner. I left the child in a pretty comfortable condition. The day following sibilant rhonchi developed themselves, and from ten in the morning until six in the evening fifteen drops of the tinc. of veratrum viride, in addition to opium, were given, with the effect of reducing the pulse from 170 to 96. The next day the same doses of the tincture were taken with the same result of bringing down the pulse. The pulse was reduced to 100 per minute, and the sibilant rhonchi were also diminished. For a week following there was no pneumonia, the pulse being in the neighborhood of 96 per minute, the veratrum viride being regularly continued. At the end of the first week the right side yielded a dull sound on percussion posteriorly, together with bronchial respiration. Pneumonia was diagnosed, but the pulse was kept down to 100 by the occasional admi-

nistration of veratrum viride. About sixteen hours after the operation, the wound was covered with a diphtheritic membrane, even to the depressions around the sutures. Shortly after the sutures broke through, leaving the wound open. The diphtheritic membrane could then be seen extending down into the trachea. The outer muscular septa were entirely removed, leaving the muscles with the appearance of having been dissected. Part of the skin disappeared under an almost gangrenous process. The wound, from being originally four inches in extent, increased in the course of five days to six or seven inches. There was no contraction in the tissues after the removal of the tube. The wound in the trachea was from one and a quarter to one and a half inches in length, by one-third of an inch in width. The child during all this time remained in an apparently satisfactory condition, eating and drinking a little, and taking quinine and stimulants; the pulse would rise occasionally to 120, but would be kept under control by well timed doses of veratrum viride. During the last week dulness on percussion increased, and the bronchial respiration as well. The appearance of the wound, however, improved, and the patches separated. The smell from the breath began about this time to become very offensive, very much resembling the odor of gangrene of the lung, and increased up to the day of death. The day before death the pulse increased to 130, but there were no symptoms of change in the pneumonia. There was paralysis of the pharynx, which had commenced four or five days before. This latter symptom increased to such an extent, that the fluids swallowed would be regurgitated through the tube. The child died rather suddenly on Wednesday morning.

Autopsy.—The larynx is still covered with diphtheritic membrane, but not to such an extent as to occlude it. Part of the trachea was also covered with the membrane, and in patches it extended below the bifurcation. The left lung is in a pretty normal condition, with the exception of a small pneumonic infiltration. The left lung was entirely infiltrated, especially at its anterior portion, the posterior portion being partly natural and partly emphysematous. There is evidence of a recent pleuritis in the shape of adhesions, between the lower lobe of the right lung and the costal pleura.

MALFORMED FŒTUS.

DR. FINNELL presented a malformed fœtus on behalf of Dr. Harding. Most of the abdominal organs were external; there was double talipes varus on one side, and valgus in the other. Besides this there was spina bifida in the lumbar region.

DR. JACOB remarked that cases of hernia of this sort were not so very rare. He thought that inasmuch as the opening in the median line was very small, the hernia must have taken place very early. He advised that a careful dissection of the specimen be made, and that the results be presented in full at a future meeting.

The Society then adjourned.

FOREIGN CORRESPONDENCE.

LETTER FROM RUFUS KING BROWNE, M.D.

THE BERLIN SCHOOL OF PATHOLOGISTS AND THEORIES OF PATHOLOGY.

WHAT is characteristic of this school, what distinguishes it from all others of a similar character, is its understanding of abnormal tissue-growth, and pathological change. In the former particular it differs from all the others—a difference which is that of the new from some mere variation in conception of the *old*. The understanding I refer to dates from the researches of Virchow, and originated with him. But it is necessary to a proper apprehension of the claims of this School, that I should state this difference briefly but intelligibly; and to accomplish this purpose most effectually, let us select an example from

anatomy proper. Let it be morbid growths or tumors. Up to the present time the prevailing notion in the pathology of abnormal tissue-change, notably of abnormal *tissue-growth*, was that it originated in, and in its beginnings was formed entirely of some morbid substance—some vicious matter *exuded* by the blood-vessels from their contents, at the seat of morbid growth; and this deposit was supposed to be capable of *development* into the textural structural characters which might afterwards be found in that growth. This is the *oldest* doctrine in pathology, and is now the prevailing one among the physicians of England, France, and other countries. It was easy to question this doctrine in the interest of some proposed modification of it, but very difficult to ascertain the truth respecting such abnormal growths, and by the truth distinguish it as an error. While this doctrine had undisputed sway, questions of the kind were rarely referred to the microscope. Yet it was alone by this means that the truth could be ascertained, and this is what Virchow at last did. True, the microscope was used to discern the histological characters of such growths, but then, under the insensible but potent effect of the old doctrine, it was used to show how different a cancer cell was from a normal one, suggesting a *radical* difference in the two kinds of tissue elements, that they could not have had a common *origin*, thus tending to confirm the observer in the old doctrinal prejudice. This doctrine Virchow shows to be false. He shows that these growths did not arise from any deposit or exudation, but were, from their very beginning, the product of the histological elements of the tissues, at the very point where the growth begins. The abnormal tissue was in fact *their* growth, and consisted, so far as texture elements were concerned, of histological elements precisely like themselves; elements of which they were the parents, and begotten by the parents *precisely where they were* found. Hence no abnormal growth whatever, no amount of bodily substance either in quantity or texture, other than the perfectly normal and physiological, was some foul, effete, exuded substance prone to "*organization*;" some "plastic form of matter," which, once exuded, commenced a career of structural growth; but on the contrary was so much "excessive and perverted," if you will, growth and multiplication of the number and extension of the textural relations of the elements of tissue always there, since they had pursued their previous career of physiological growth.

Of course, this understanding was not the product of a single discovery in tissue, but the growth of years of studies of the elements of tissue, and unlike the other, was not at all begotten as a *doctrine*, but was finally adopted as the only explanation of the numerous findings of these observations; and the appearance of the truth in doctrinal form was necessitated by the older doctrine to be confronted. It is the ascertained, the true, and its form was simply an *account* of the facts. Virchow never sought a doctrine in pathology to combat the old. That process it had been again and again subjected to, by doctrines which were a more or less bold variation from its form, but always retaining its substance. Against these *formal modifications*, but not essential denials, it could hold its own, because they were *substantially* the same.* Of course this new understanding could only be begotten of a more perfect *knowledge* of human histology than preceded it. The old doctrine was merely *conjectural*—arose and continued in destitution of our present more complete knowledge of elements of living tissue, and of course could only cease to live as a doctrine, by the substitution of that knowledge, involving a correct understanding, where it presented false conjecture; and the one is bound, and that very soon, to obliterate the other from the medical mind, whatever want of understanding, arising from defects of the knowledge in question or entire ignorance, may retard the consummation of this. Older, men may be; they seem to regard "grey hairs" as a perfect substitute—a complete work of scientific wealth.

* See pathological works and observations of Paget, Broussais, et alæ, modern and ancient, Peaslee's very valuable Human Histology, etc. etc.

The one is *science*, the first was surmise; and so soon as teachers of medicine come to a knowledge of the fact, get to see the difference here illustrated, so soon will the *scientific era of medicine dawn*.

But I must condense. This new knowledge in pathology, the development of which, from our previous state of mere prejudice in some scientific things, and which constitutes a real advance, is not only fundamental to morbid growths, but finds that other forms of disease of this or that organ, which in pathology we have all along deemed to be processes very different from the above, nearly involve the very same elements, enacting a nearly similar part in the one as the other. Thus for example, in accordance still with the old doctrine, the fundamental portion of which remained the same, whatever differences of process, as for instance, that between a tubercular mass and a tumor, we superinduced upon it; tubercles of the lung were masses of *materia morbi*. But in accordance with the new pathology we know that these tubercles are in minimum, precisely what the tumor is in maximum. It makes no difference what degenerative changes, and they are various, these may undergo—and these are all subsequent to the period of its growth; but in its elements and their career, in its origin and growth, it is the same as a canceroid tumor. Now whoever is inclined to dispute the full value of claims for the knowledge of tissue growth identified with the new pathology, and its use as enabling us to *account* for unexplained diseases, may here find an exemplification of it. Tubercles were found in various parts of the body. It was not therefore a diseased state of the pulmonary tissue alone; yet with the fact well known, are we thereby enabled to account for the origin and nature of tubercles? We know the answer. We know the "*fact*," as we say; and this by the way, is the exact character of the knowledge so vainly heralded as "*experience*" by many ancient practitioners; but where was the *understanding* of the case? That was what we lacked. But the moment we had ascertained, by a more or less complete visual analysis, what the formation of this mass was, we had an understanding of the case; we had in other words so much science, so much pathology.*

(To be Continued.)

NITRATE OF SILVER IN THE PARAPLEGIA OF CHILDREN.—

Dr. Bouchut employed the nitrate of silver internally in the case of a child, aged seven years, in the Hospital of Sainte Eugénie. The patient had had a fall from a height of a few feet, and immediately complained of acute pain in the dorsal region. From this time the child was unable to walk, and when she was placed upright the legs bent and sank down under the weight of the body. The speech became slow, difficult, and indistinct, and the food partly escaped from the mouth during mastication. For nearly a month only the expectant treatment was adopted; but Dr. Bouchut then conceived the idea of treating the paralysis with nitrate of silver, according to the views of Wunderlich, and Charcot, and Vulpian. He therefore prescribed one centigramme of the nitrate, divided into two pills, to be taken every day; and this treatment (occasionally varying the dose) was continued for more than a month with success, for at the end of this time the child left the hospital perfectly cured.

* I hope the reader will have the courtesy to indulge me *en passant* in saying that if the former, *i.e.* the "*fact*," was but of little value without the latter, *i.e.* the understanding of it, this latter is precisely what many practitioners condemn as "*theory*," and proclaim themselves as disregarding of being devoid of it; that is, as being destitute of it. But this latter is precisely what constitutes the whole exact knowledge or science in the case. Of course such persons do mean to confess this destitution, by acknowledging it as exact knowledge. They are instinctively constrained therefore to pronounce it "*theory*," in order that this destitution of knowledge may not be confessed to themselves, which is pictured by their personal and professional vanity—nor permitted to be palpable to others. But any right-minded man knows by experience, that vanity is depressed, not exalted by exact knowledge; of course the persons I allude to do not *know* their ignorance. To know their ignorance is to have the knowledge in the case.

American Medical Times.

SATURDAY, APRIL 16, 1864.

PLEA OF INSANITY IN CASES OF MURDER.

THE public papers of England, medical and literary, have generally given their opinion on the case of GEORGE VICTOR TOWNLEY, the murderer of Miss GOODWIN, who was tried in December last. Although remote from the scene of that horrible drama, and the melancholy consequences which followed it, in the midland circuit court at Derby, and again in the prison, we regard it as our duty to express an opinion upon this case, as exhibited in the trial, the verdict, the condemnation, and finally the commutation of death for perpetual hard labor, by the Crown. Aside from the special interest which attaches to TOWNLEY's case, it bears some analogy to that of MRS. REAL, of this city, who in 1862 killed her alleged husband, on a breach of good faith and suspicion of inconstancy. The public, and especially its most sensitive part, was at that time much interested in the final result of the trial of that poor girl. Still a just verdict and a merciful punishment vindicated the public morals. Since her trial, the alleged insanity of MRS. REAL has vanished, and probably repentance has also purified her mind and will. We may add, with pride, that instead of an invidious opposition, so easily discernible among the English experts in the TOWNLEY case, we have, in the testimony of DR. BROWN of Bloomingdale, and DR. RANNEY of Blackwell's Island, in the case of MRS. REAL, that earnest and conscientious regard for justice, truth, and humanity, which should ever characterize the members of our profession.

Whoever reads the details of the TOWNLEY case, must feel that a profound moral perversity, or perhaps the most brutal self-love and cowardice, were, directly or indirectly, the cause of the murder of a young lady who was, it appears, untrue to a first love and false to a promised marriage. As we contemplate on the one hand the unhappy victim, and on the other the perpetrator who asserted coolly, in self-defence, that this woman was *his*, as any other chattel with whom he might have done the same, we believe that human justice, in its first impulse, would at once determine her course. She would call for CALCRAFT, as an aid not only to enforce morality, but to maintain social guarantees. To many persons the executioner would then appear as a minister of revenge and retaliation.

But, on sober consideration, a crime like this, which is not the result of gross, ordinary ignorance and perversity, evidently called for a thorough investigation as to the mental state of the suspected criminal. And it must be regarded as a remarkable proof of the high civilization of a nation, that the test of insanity is applied in such an aggravated case as that of TOWNLEY. It is in such cases that human justice, laying aside all prejudice and passion, approaches nearer and nearer to the divine. But it is unfortunate that too often justice is thwarted by the ignorance and prejudice of her ministers. In this case we meet a judge imbued with the most perverted notions concerning judicial precedents, and who falls into singular errors about the nature of delusions, making no difference between

those which are physiological and those which are morbid. Nor, indeed, does he make any distinction between the power to distinguish right from wrong. No account is taken of the previous state of health of TOWNLEY, nor of any hereditary taint of insanity in his family, and, above all, of any physical symptoms, present or absent. In regard to the question of the prisoner's insanity before, during, or after the crime, no one seems to have had any knowledge. It was reserved for DR. FORBES WINSLOW, a man of great scientific ability, perhaps somewhat vain and dogmatic in his assertions, but who has never proved mercenary, to give evidence on this point. This gentleman declared that he could not vouch for the insanity of TOWNLEY at the moment of the commission of the deed, but that he had *suffered* since from a delusion about a conspiracy organized against him. He also discovered that there were proofs of insanity in the maternal line of the prisoner. In spite of these doubts, held by a man of great reputation, under the influence of the charge made by the presiding judge, the jury, after *five minutes'* consultation, returned a verdict of *guilty*.

After the condemnation of TOWNLEY to death, two magistrates were led to interfere. They declared him to be a man of unsound mind; and thereupon SIR GEORGE GREY, the Secretary of State, appointed, with the consent of the LORD CHANCELLOR, four experts to examine and report on the mental condition of the convicted prisoner. Two of these gentlemen are visitors of chancery lunatics, the other two superintendents of public and penitentiary lunatic asylums. They reported the prisoner in the possession of all his faculties; that he entertained no delusion on the subject of a conspiracy against him; that it was rather a figure of speech concerning the party engaged in the prosecution. They considered the evidence of hereditary predisposition to insanity, and their opinion of the prisoner's state of mind was not thereby altered. Upon the rendition of this insufficient and summary report, the prisoner was condemned to life-long penal servitude.

In our opinion, in this case the forms of justice have been disregarded, and ignorance has prevented its application. Could it be honestly supposed that the doctrine of DR. WINSLOW is: "*The greater the rogue a man is, the more entirely is he free from responsibility?*" The *Journal of Mental Science*, which is unfriendly to Dr. W., approves and reproduces insinuations that such is his theory. We maintain, also, that ignorance has prevented an act of justice, and we find the proof in the tenor of written affidavits made in England by the majority of psychopathists, and even by some of the most eminent. And this criticism is applicable also to the evidence given by DR. WINSLOW. If TOWNLEY, in consequence of an hereditary cachexy, became insane after the commission of the deed, where are the symptoms of his disease? If he is of a sane mind, a scientific examination ought to have related and described that state. In all cases, the law demands symptoms and not assertions—physical signs of insanity, and not suppositions on the debatable ground of psychology. And it is particularly objectionable, in cases of life and death, to make reports stating facts, unaccompanied by their concomitant proofs. The ground taken by the *Journal of Mental Science* against DR. WINSLOW proves the necessity of a real medical diagnosis. Here is an extract from that journal: "Science has established that when the soul or mind is obviously perverted, there must be some organic

disease of the brain to account for this. The probability is that a man who pertinaciously indulges in evil thoughts and passions may affect his brain with disease." But the journal is not happy in its conclusion—that *vice in such case is already insanity*; and it is still less pardonable for it to suppose that such is DR. WINSLOW's theory. According to its own premises, the journal ought to have concluded that organic lesions are necessary to destroy human conscience and responsibility.

In spite of the irregularities of the court at Derby, we feel no sympathy for TOWNLEY. At the same time we rejoice that he is not to ascend the gallows. Time will vindicate the truth; and DRs. WINSLOW, BUCKNILL, HOOD, MEYER, and HELPS may live to learn its verdict.

ARMY OF THE POTOMAC.

A CORRESPONDENT of the *London Med. Times and Gaz.*, whose letters from the Army of the Potomac we have quoted, furnishes some interesting particulars in his last communication of Feb. 14. He represents the present condition of that army in an excellent sanitary state. During the winter the troops have been well housed and fed, and the sickness and mortality rates are consequently very small. He thus describes the Division Hospitals of the Second Army Corps:—

"The division Hospitals of the Second Army Corps' situated in the neighborhood of Brandy Station, from the elegance of the style in which they are got up, resemble far more pavilions built for some rural *fête* than the cheerless notions one might preconceive of a field hospital raised upon debatable ground. All the tents are floored, and furnished with fireplaces. Requisitions were sent in for stoves, but they were disapproved. In front of the tents are promenades, garden plots, evergreen bowers, tasteful fancies executed in moss. One can scarcely realize that this ground in December was a thick-set forest, yet so it was. This hospital can accommodate from 250 to 300 patients. To each of its three divisions are attached a well furnished sanitary store-room, a commodious kitchen, dispensary, and sinks, and to the whole is added a post-mortem room, where the bodies of fatal cases are embalmed by the medical officers, in order to preserve them, if required, for transmission to friends in the north. At some little distance from the main structure is a pest-house for the small-pox cases that may occur in the corps. The establishment is altogether a complete affair, and certainly sufficient praise can hardly be bestowed upon those connected with it for the energy and taste they have evinced in its construction."

The rate of sickness and mortality is given as follows:—

"The following figures may give you an idea of the rate of sickness and mortality prevailing in this army during the last two months. The camps from which these ratios have been deduced contained an average strength present during the month of December of 12,000 men; during January, 11,900.

	December, 1863.	January, 1864.
Daily rate of sickness per 1000 men present,	36.77	48.02
Death rate per 1000 men present during the month,	2.48	2.44
During the month of January, 1864—		
The percentage of fever cases among sick was	10.74	
The percentage of deaths among the fever cases	2.28	
The percentage of diarrhoea among sick	27.95	
The percentage of deaths in diarrhoea cases	2.55	

Alluding to the arrival of recruits he notices the shameful neglect of duty by the surgeons on recruiting service.

In one company of 500 recruits, eighteen per cent. were found incapacitated. He recommends that the recruiting surgeon pay, as in the British service, the expenses of a rejected recruit.

NEW YORK MEDICAL INDEPENDENT.

WE have received the first number of a new medical periodical, with the above title, about to be issued weekly, in this city. From the Prospectus we learn that "The objects of the *Independent* are to elevate the medical profession, by advocating improvements and reforms wherever practicable; to stimulate a purely American medical literature; to unmask abuses and quackery of all kinds; to urge a higher standard of medical education; faithfully to chronicle discoveries, advancements, and progressions made in every branch of medicine and surgery; to discuss topics of interest to the profession, and generally to be a true, faithful, and independent representative in periodical literature of the American medical profession." The editorial and publishing departments are conducted without names, and the present number is dated May 4th, 1864. This number contains the commencement of the translation of Vichow's work on Tumors; an interesting communication from Prof. PERCY, on McMunn's Elixir of Opium; a brief introductory; a few "selections," and a short review.

THE WAR IN SCHLESWIG.

DURING the first year of our civil war, the Medical Department of our army was for a time the special subject of unfavorable comment. At length we have an opportunity of witnessing the progress of a small European war, between nations which have uniformly boasted of their military science and the perfection of their preparation. But the reports which reach us from the battle-fields are by no means so favorable to their skill and science as we had anticipated they would be. The following from a foreign medical journal proves that in Schleswig, the Austrians and Russians are reacting the scenes which once excited their ridicule:—"The correspondent of the *Vienna Medical Journal*, writing from Schleswig, says that, at the commencement of the war, the sick and wounded of the Austrian army were most ill-cared for, but that things are now getting into better order. Wounds, for the most part, heal favorably; and few deaths, comparatively, even after severe wounds, have occurred. Pyæmia has not shown itself; but six cases of tetanus have proved fatal. We conclude from the letter, that the Austrian sick and wounded would be in an evil case, were it not for the attentions they receive from Schleswig-Holsteiners. The Prussian army is, we also read, in no better condition in its sanitary arrangements than the Austrian. . . . Another correspondent writes from Apenrade a sad account:—"The soldiers lying for two and three days in slushy snow, after long marches, were also half-starved. Even officers, with money in their hands, were scarcely better off. Besides the horrors of a winter campaign, we have had the martyr-scenes of wounded lying two or three days in the open air, helpless, without food, without attention, and yet brought still living into hospital. I saw between Selk and Schleswig, in a field, two wounded Danes and two Austrians, who must have lain there two or three days. Their first word was "hunger." The French campaign in Russia has been repeated here in a small way. The health of the troops is on the whole, nevertheless, satisfactory."

Reviews.

THE TRANSACTIONS OF THE AMERICAN MEDICAL ASSOCIATION, instituted in 1847. Vol. xiv. Philadelphia: 1864. Pp. 416.

AFTER a recess of two years in consequence of our national difficulties, the American Medical Association resumed its sittings, by holding its fourteenth annual meeting in June last, at Chicago, Ill., and has issued a new volume of Transactions, which, though it bears but poor comparison, both in point of size and contents, with its predecessors, nevertheless contains much that is interesting, and may be hailed as an indication of returning life to the Association. We see no reason why these meetings should not be continued with the same, and even more interest than ever; and indeed we venture to predict that if the proper spirit prevail among the profession, the approaching session to be held in this city in June next will be more largely attended, characterized with more earnest labor, and more fruitful of good results than any of the previous meetings. There has never been a more urgent necessity for the Association, its working men, collectively and individually, to put forth their best energies than at the present time. While our civil war has taken men from the peaceful occupations of private life, and transformed them into great generals, it has also taken many of our profession, and developed talents in them which otherwise might have lain dormant. It has presented to us subjects for investigation on a scale such as has never been known in any country. The various branches of military practice, the different diseases incidental to camp life, with camp and hospital hygiene, to say nothing of spotted fever, and the various other phases that disease has recently assumed, as met with in private practice, are all subjects deserving careful study, and which we hope will receive full consideration at the next meeting of the Association.

THE ADDRESS OF DR. WILSON JEWELL, Acting President of the Association, is eloquent and patriotic. After alluding in warm terms to the patriotism and self-denial of our volunteer army-surgeons, and paying a handsome tribute to the memory of the late lamented president, Dr. Eli Ives, he selects Hygiene as the subject of his address, and strongly urges its claims upon the profession, proposing to elevate it as a branch of study to a separate chair in our medical schools, and the adoption of more effectual measures for its general appreciation and cultivation.

Report of the Committee on General Education, by CHRISTOPHER C. COX, M.D., Surg. U.S.V.—On previous occasions the attention of the readers of the *MEDICAL TIMES* has been called to the defective primary education of medical men. Dr. Cox points out this evil as the first to be remedied, and shows the necessity of a high standard of preliminary education, as essentially requisite, in order to secure a degree of mental discipline sufficient to enable the student to pursue with the greatest success his professional studies, and to form habits of thought and correct judgment, by which alone he can grapple with the facts of science, and appropriate to the best advantage the experience of others. He recommends change in the entire system of medical instruction, the number of professors increased, the lectures increased to three courses of six months each in duration, and punctual attendance obligatory. Frequent examinations, clinical instruction, and the final examination to be conducted by a Board of Examiners, selected from the first medical talent of the State, without the presence of the faculty, are among the measures recommended.

Report of the Committee on Medical Literature, by CHARLES A. LEE, M.D.—The writer gives a general view of the character of American medical literature, with a list of those periodicals at present published, and those discontinued since 1860; and also a list of American and European

publications, from which we learn that "forty-six new American medical works have been published since 1860, and fourteen new editions of works already issued; while during the same period, eighty-five minor medical publications and pamphlets, eighteen reprints of new foreign works, and twenty-one new editions of foreign works have appeared." For the purpose of encouraging a national medical literature he recommends the establishment of an association on the plan of the Sydenham Society of Great Britain, with as large a body of subscribing members as can be obtained, with a competent publishing committee, etc.; the State and County Medical Societies and other organizations to offer suitable prizes for the best essays on special subjects; medical colleges to do the same for the best inaugural thesis; the formation of medical libraries and book-clubs, for the purpose of furnishing at a cheap rate all the important medical journals, domestic and foreign; and above all, the raising of the standard of medical attainment, by a reform in the present system of education, both preliminary and professional.

Diatheses: their Surgical Relations and Effects, by PROF. E. ANDREWS, of the Medical Department of Lind University.—"How shall a dangerous diathesis be diagnosed in advance of any perilous manifestation of its effects? And it being diagnosed, how shall it be corrected with the promptness and certainty required to ward off its fatal consequences?" are questions, correct answers to which the writer says constitute the next great improvement needed in surgery. In treating his subject, he confines himself to the aplastic, normal, and hyperplastic diatheses, as the three most important to the surgeon; the first of these especially, and readily known by its train of evils, as erysipelas, phlebitis, pyæmia, metastatic abscess, hospital gangrene, etc. "The surgical patient manifests a total loss of the power of effusing and organizing plastic lymph. Ulcers enlarge instead of diminishing; wounds fail to unite by first intention; every little scratch or abrasion suppurates; and injuries of a deeper kind terminate in effusion of pus without the usual amount of plastic effusion around the abscess." As a cause of this, he gives the excess of alkalies in the system, from the fact that soda and ammonia are the natural liquifiers of protein compounds in the living body; and also from the fact that the most powerful and rapid cause of aplasticity is an over-crowded ward of wounded men, where the decomposition of pus and other secretions keeps the air filled with alkaline ammoniacal vapors. The hyperplastic or rheumatic diathesis being the opposite of the aplastic, and remedies for aplasticity being such as neutralize alkaline solutions, seem to point to aplasticity as the alkaline diathesis. As an effect of this diathesis we have the erysipelatous poison resulting from the decomposition of certain tissues and fluids, a depressing irritant which gives a typhoid and malignant character to diseases with which it may be associated, as is often seen in puerperal diseases, malignant scarlatina, confluent smallpox, and the fearfully destructive effects of syphilis. On the other hand, if erysipelas is received by contagion or accidentally inoculated into a plastic constitution, it acts simply as a violent irritant, setting up a local inflammation which is inclosed by a barrier of solid plastic lymph, within which suppuration takes place, resulting in furuncle or carbuncle. The conclusions are: "The active malignant element is the erysipelatous virus. The aplastic diathesis gives this virus an opportunity to exert its full destructive influence. The plastic diathesis builds barriers around the poison, and casts it out of the system." The diagnosis of this condition is easy, as every little scratch, pimple, or slight wound contributes its share towards declaring the patient's diathesis, either by its tendency to suppurate, with a deficiency of solid swelling at inflamed points on the one hand, or its rapid healing without suppuration, and hard, firm swelling at inflamed points on the other. Treatment should begin with regimen, and the first requisite is plenty of fresh air. The diet should consist of the free use of meat, to increase the acids of the system, and to promote

plasticity. Vegetables increase the alkalies. The acid of fruits is not favorable, as acid fruits contain potash, and the acids are digested in the stomach and destroyed, adding nothing to the acids of the system, while the potash is absorbed. Medication should consist of perchloride of iron internally, sulphites of lime and soda internally, bromine and iodine locally, mineral acids internally and externally, and quinine in malarious districts. The hyperplastic diathesis is the opposite of the aplastic, and has for its typical disease rheumatism, due to an excess of acids in the system, the treatment for which is substantially the same as for rheumatism.

The American Method of treating Joint Diseases and Deformities, by HENRY G. DAVIS, M.D., of New York.—Dr. Davis gives a historical sketch of the treatment of these diseases by extension, and gives the distinctive principle of his treatment, viz:—"Procuring to the diseased structures support without pressure, and motion without friction. The treatment itself, concisely defined, consists in abstraction of the joint affected, by continued elastic pressure." This apparatus is fully described and illustrated.

Case of Diarrhœa Adiposa, by JOHN H. GRISCOM, M.D., Physician to the New York Hospital.—The description of this case is accompanied with an analysis of twenty four previously reported cases. Dr. G.'s case passed a substance like melted butter, hardening on cooling. From one to two and a half ounces per diem were voided at frequent intervals, during six years. It followed protracted dysentery and anasarca, and yielded to the administration of six or eight ounces of whiskey per diem.

Report on American Medical Necrology, by CHRISTOPHER C. COX, M.D., Surg. U.S.V.—This report, though incomplete, gives us some idea of the vacancies death has made in our profession since the New Haven meeting; and even from our midst have gone such men as Isaacs, Hoffman, Francis, Ruse, Kissam, Williams, Cheesman, Harson, Cammann, Watson, and many others, whose loss is severely felt, both in and out of the profession.

The remaining portion of the volume is principally occupied by the *Prize Essay on the Physiological and Medicinal Properties of the Veratrum Viride*, by SAMUEL R. PERCY, M.D. This paper will be noticed at another time.

Correspondence.

NECESSITY OF MAINTAINING THE PHYSICAL STRENGTH OF RECRUITS AND SOLDIERS.

[To the Editor of the AMERICAN MEDICAL TIMES.]

"THERE are, particularly, two important results to be obtained from this scrupulous care in compiling the history of a war. The first is, that of reducing to less than half the mortality of those brave soldiers who so generously shed their blood for their country; the second, merely a corollary of the first, that, by reducing the mortality of soldiers, the strength of armies will be proportionally increased, and thus very often the fortune of war decided."—*Shrimpton on the Crimean War*.

"The loss to the Government has thus been inconceivably great at every attempt to recruit its armies. Thousands who, with proper early training, would have become capable and efficient soldiers, have fallen victims to the diseases induced by the sudden and violent transition from a life of well ordered and systematic labor, and a table teeming with various and well prepared food, to the wants, privations, and exposures of the camp. We have seen regiments, while waiting in these camps, waste away from the maximum strength to a mere skeleton. This negligence is the more inexcusable because the places of rendezvous are generally located in rich farming districts, where every necessity can be readily and cheaply supplied."—AM. MED. TIMES.

The results attending the putting into the field the tem-

porary force called out to repel the invasion of Gen. Lee, in the early part of the summer of 1863, which came under my personal observation, will serve as an illustration to the above remarks. This force was collected hastily at Harrisburg and Reading, Pa., from New York, New Jersey, and Pennsylvania. The men all came from healthy districts, and left their homes in good health. Before leaving Harrisburg, it became my duty, as Med. Director of the Department of the Susquehanna, to provide hospital accommodations for the sick of this force, for diseases contracted during a little over a week's stay at Harrisburg. I established, for this purpose, in less than two weeks, five general hospitals in Harrisburg, which were almost immediately filled. The well troops then took up their line of march to overtake the enemy.

It soon became necessary to open a hospital at Carlisle, for the sick left behind there. So many sick were left along the road, and at Shippensburg, twenty-two miles distant from Carlisle, that I was obliged to establish another hospital at that place. At Chambersburg, eleven miles further on, the number of sick and broken down men from this same force, made it necessary to open three hospitals at that place, which were soon filled. In addition to these, small hospitals were started at Mercersburg, Waynesboro', and Hagerstown, where the sick and broken down men, left along the roadside and at farm-houses, were collected.

Although scarcely any of these men died (during the first month, I believe, not a single case of death was reported), yet they were disabled for a time, never reached their destination, and were unable to return to their homes until after their services were no longer required. It must be borne in mind that this force was perfectly well to start with, the season of the year most favorable, and yet, from the suddenness of the change of habits and food, they were unable to bear up under the unaccustomed privations and exposure to which they were subjected, which would have been a mere nothing to them if they had had time to be seasoned to their work by a little previous training. Owing to the pressure of events, no time was allowed for this purpose, and all the arrangements made for them as to supplies of every kind were, from necessity, imperfect.

As the enemy occupied the country in front of the troops, the supplies (except what they could carry, which was very limited) had necessarily to be left in the rear, and sometimes the commissary supplies, from the difficulty of obtaining transportation in the country, were delayed, and when obtained, were hastily and badly cooked. From the causes mentioned, nearly one-tenth of the troops, I think, called out for the emergency, in three weeks from the time they left their homes were in hospitals, and lost to the government. The records of the Surgeon-General's office, where accurate reports were forwarded, will show the precise number admitted to the hospitals mentioned, from a force raised for active service, when, from military necessity, no time or opportunity was allowed to make the arrangements known to be necessary to preserve the health of the troops at depôts, camps, or in the field.

The reform needed is, that the place of rendezvous, depôts, and camps be immediately improved in every respect, and that the transition from civil to military life be as gradual as possible. The food supplied at these places should be abundant, of proper variety, and well cooked by skilful persons. The clothing should be good, and the sleeping apartments dry and comfortable. The camps for collecting troops should be well selected and properly drained, and every attention paid to the comfort of the men, who should be scientifically trained to exercise and fatigue, under the direction of qualified officers.

It has sometimes happened that troops have been ordered to points where no provision has been made for their accommodation, either as to sleeping or eating, and thus have been left to provide for themselves or go without; and before their wants were supplied a number, unaccustomed to such exposure and privations, are taken sick. The effect of such treatment is to discourage enlistments and

induce desertion; and many good soldiers, in a fit of disgust and disappointment, desert the service at these places on finding no arrangement made for their comfort, who might otherwise have been retained. These facts I have learned from frequent personal intercourse in the discharge of my professional duties, while looking into the causes affecting the health of the soldier and the interest of the service.

How important, therefore, that in the large levy of troops about to be made, the authorities should heed the lessons of the past by making more ample provision for the future.

In offering the above considerations it is proper to add that, owing to the extreme urgency of the occasion for calling out this temporary force, the best was done by all that the circumstances would admit, and no censure can be attributed to any having charge of its management. My sole object has been to show the influence of unavoidable causes upon the health of the troops, and to draw a lesson for the future, if, happily, in our power to do so.

W. S. K.

CINCINNATI.

Army Medical Intelligence.

ORDERS, CHANGES, &c.

Surgeon John H. Rauch, U.S.V., has been ordered to repair to Detroit, Mich., and assume charge of the affairs of the Medical Department in that city, reporting to Major-General Heintzleman by letter.

Hospital Chaplain L. G. Olmstead, U.S.A., has been transferred from the Clay General Hospital, Louisville, Ky., to the General Hospital, Jeffersonville, Ind.

Surgeon C. F. Campbell, U.S.V., has been assigned to duty as Medical Inspector, Department of Virginia and North Carolina; orders assigning him to Chesapeake General Hospital, have been revoked.

Assistant-Surgeon W. O. McDonald, U.S.V., has been assigned to the 1st Battery, 15th U.S.I., 14th Corps, Army of the Cumberland.

Surgeon Wm. Watson, U.S.V., to the Hospitals of the Post and Prison, Rock Island, Ill.

Assistant-Surgeon John C. Norton, U.S.V., to the 16th and 19th Infantry, Army of the Cumberland.

Captain J. C. Peterson, 13th U.S.I., Assistant to the Provost Marshal-General, is directed to examine the minutes of Hospitals and Convalescent Camps in the States of Ohio and Indiana, and in the Department of the Cumberland, with a view to the selection of men for the Invalid Corps, and their transfer to such points as their services may be required.

Surgeon R. M. S. Jackson, U.S.V., who accompanied Major-General Foster from Knoxville, Tenn., to Baltimore, Md., has returned to his post.

The assignment of Surgeon A. C. Schwarzewelder, U.S.V., to the General Hospital, Camp Nelson, Ky., has been revoked.

Brigadier-General Julius A. White, U.S.V., is authorized to grant furloughs to enlisted men in hospital at Springfield, Ill., and to order them to report at the expiration of their furlough (if not fit for field duty) to the nearest U.S. General Hospital.

The small-pox broke out among the negroes at New Iberia, La., on the first of January, about sixteen cases occurring daily. The epidemic has, however, been controlled, the Medical Director there having caused the whole population as well as the troops to be vaccinated.

Dr. Alexander Love, of New York, to be Assistant-Surgeon 43d regiment, U.S. Colored Troops, to report to the Commanding Officer, Camp William Penn., Philadelphia, Pa., March 7, 1864.

Assistant-Surgeon A. Waterhouse, 7th Maine Vols., to be Surgeon 43d U.S. Colored Troops, to report to the Commanding Officer, Camp William Penn., Philadelphia, Pa., March 8, 1864.

Dr. Watson Porter, of —, to be Assistant-Surgeon 43d U.S. Colored Troops, at Hilton Head, S. C., to date March 11, 1864.

Christopher J. Crouch, of Pennsylvania, to be Hospital Chaplain U.S.A. Hospital Steward John M. Whitney, U.S.A., discharged at his own request, March 8, 1864.

Hospital Steward Charles W. Oleson, U.S.A., discharged from the date of the acceptance of his appointment as Assistant-Surgeon 14th U.S. Colored Troops.

Dr. Harvey Bussey, Contract Surgeon, discharge to date October 22, 1863, the day he left General Hospital No. 7, Louisville, Ky.

Surgeon E. F. Bates, U.S.V., Recorder of the Army Medical Board for the examination of Asst.-Surgeons of Vols., died at Washington, D.C., on Sunday, March 6, 1864, of ileo-colitis. He was faithful and efficient in the discharge of his duties, and his medical attainments were unusual in one so young, raising him during a service of about one and a half years from the grade of Medical Cadet to that of Surgeon in the Volunteer Medical Staff. Deceased was, we believe, a resident of Michigan.

The resignation of Surgeon John C. Dalton, U.S.V., has been accepted by the President, to take effect March 5, 1864. Surgeon Dalton entered the service August 3, 1861, as Surgeon of Brigade, and after a long service in the Department of the South, was assigned to duty in New York city as Medical Director of Transportation.

Leave of absence has been granted Surgeon P. A. Jewett, U.S.V., with permission to visit the city of Washington, for ten days.

Original Lectures.

LECTURES ON
GUNSHOT INJURIES OF THE CHEST.

By FRANK H. HAMILTON, M.D.,

PROF. OF MILITARY SURGERY AND FRACTURES AT BELLEVUE HOSP. MED.
COLLEGE, AND LONG ISLAND COLLEGE HOSPITAL; SURGEON
TO BELLEVUE HOSPITAL; LATE MEDICAL INSPECTOR,
U.S.A.

LECTURE V.—PART II.

CASE XII.—*A post-mortem examination of a soldier who was shot with a large-sized pistol ball through both sides of the chest and heart.*—Edward Barrett, a private in the 32d New York Infantry, was shot by a sentinel on the 30th of January, 1862, through both sides of his chest and through the heart, death occurring in a few seconds. The missile was a musket ball. Assisted by Surgeons Little, Brown, Totten, and others, I made an autopsy on the same day.

The ball had entered on the left side of his chest, about four inches below the inferior angle of the scapula, striking and breaking the lower margin of the eighth rib, and carrying some small fragments into the track of the wound. The wound of entrance was rather smaller than an ordinary musket-ball, oval, its edges slightly inverted and surrounded with a reddened areola, caused by the integument being slightly abraded or deprived of its cuticle by the pressure of the ball before it penetrated the tissues. From this point the track of the ball passed through the free margin of the upper lobe of the left lung, making a contused, but not lacerated, cylindrical channel, which channel was surrounded, through its whole length, by an ecchymosis of about one inch in diameter. The ball then penetrated both ventricles and the right auricle, and through the upper lobe of the right lung, escaping in the right axilla. The track through the right lung presented the same appearance as that through the left; and the wound of exit was larger by one-half than the wound of entrance, somewhat oval also, the edges not everted, but looking discolored, as if they were blackened by powder. This discoloration was found to be due to a slight extravasation of blood into the tissues under the skin.

The heart was firmly contracted, and contained no blood in any of its cavities; but the pericardium contained about eight ounces, and the two pleural cavities much more. The lungs were completely collapsed. The wounds in the several cavities of the heart were not in any instance more than three lines in diameter, and appeared like slits, as if made by a pointed instrument; but there was no laceration of the structure of the heart, such as we found in the case of Johnson, the deserter, whose heart was penetrated by conical balls. The contraction of this organ will explain, also, in a great measure, the small size of the wounds.

After this man was shot, he uttered one exclamation, and fell apparently dead.

CASE XIII.—*Round ball penetrating the chest, and not removed—Fragments of a broken rib probably carried in—Empyema—Result probably fatal.*—Malachiah Holmes, colored servant, was wounded at Bull Run, July 21, 1861, by a round ball, which entered his back, breaking his seventh rib and penetrating his chest. He spat blood immediately. Fourteen days later I found him with the wound open, and discharging a coffee-colored and highly offensive serum. On the twenty-fourth day he was sent to his family, in a very feeble condition, with but little prospect of recovery. The ball was never found.

CASE XIV.—*Pistol ball remaining in cavity of chest—Empyema.*—William Patterson, 84th New York Cavalry, wounded Oct. 11, 1863, at Brandy Station, Va., by a pistol shot. The ball entered on the right side, near the sternum,

between the third and fourth ribs, and has never been found. He spat a little blood the following day, and this continued moderately for seven or eight days. Air escaped from the wound, also, and some blood. The shock of the injury caused him to faint and to fall from his horse soon after the wound was received.

Five months after the injury, I found the wound still open and discharging. The right side of his chest was a little contracted and the lung completely collapsed. He had a troublesome cough, with copious expectoration of pus. He was pale and feeble; but all his symptoms became aggravated when the external wound was closed for a few days. He complained particularly of pain in the back, near the upper margin of the eleventh rib; and this circumstance, together with the fact that dulness on percussion extended over all the lower half of this side of the chest, led me to suspect that the ball lay in the posterior inferior angle of the pleural cavity, near the spot indicated by the pain.

PUNCTURED AND INCISED WOUNDS OF THE CHEST.

There are certain points of difference between gunshot, punctured, and incised wounds of the chest, which are of sufficient importance to demand a special consideration.

Punctured and incised wounds are made by weapons which are pointed, or which have cutting edges—such as bayonets, swords, dirks, pocket-knives, etc., by which the tissues are penetrated and separated with the least possible amount of contusion or laceration.

The lips of these wounds are not in general widely separated.

They are seldom accompanied with broken ribs. The internal tissues are neither contused nor lacerated.

Only in very few examples are foreign bodies left in the track of the wound.

It follows that punctured and incised wounds often close in their whole extent without suppuration. And in order to insure this result, we do not hesitate now to close the external wounds at once and hermetically; instructing the patient, moreover, to lie as much as possible upon the wounded side, in order to favor adhesion of the pleura-costalis to the pleura-pulmonalis.

It is to these cases especially that the practice recommended by Surgeon Howard, of closing the wound hermetically, by the aid of sutures and collodion, etc., is eminently applicable. If the wound is closed simply by adhesive plaster, the constant motion of the chest is apt to make it open again, and thus to defeat the object we have in view.

If, notwithstanding all our care, inflammation of the pleura takes place, and serum, with lymph or pus, become effused into the cavity of the chest, an opening should be made early with a trocar and canula, to which a pump, furnished with a valve, may be attached, after the plan suggested and practised by Dr. Bowditch, of Boston, Mass.; and if, having made this exploratory operation, the cavity is found to contain only serum and lymph, the wound should, as soon as the fluid is evacuated, be again closed hermetically; the same operation to be repeated at some other point, from time to time, as it may become necessary. If, however, the fluid contained in the cavity is found to be pus, then I think that a free opening ought at once to be made with the knife, and in the most depending point, so that the matter may be allowed to escape without obstruction, and without any reference whatever to the admission of air. I will suggest, also, as the most certain method of securing an outlet at the most depending point, that a strong and long probe, attached to a firm handle, should be bent and carried to the bottom of the pleural cavity, and then pressed outwards between the ribs, to serve as a guide to the incision. A long, flexible, metallic catheter might serve the same purpose as a probe, or in some cases even a solid steel instrument, such as a sound. Something like this method has already been suggested and practised by other surgeons.

EXAMPLES OF PUNCTURED WOUNDS OF THE CHEST.

CASE I.—*Superficial punctured wound of the chest.*—Owen McGuire, of Brooklyn, was received into the Long Island College Hospital, while I was surgeon-in-chief there, having been wounded with a bowie-knife in the right side of the chest. He had received two wounds, both of which were superficial, the knife having struck upon the ribs and glanced, so that, although the wounds were four or five inches in depth, they did not penetrate the cavity of the chest. He was a good deal alarmed at first, and experienced some embarrassment in respiration, in consequence of the injury inflicted upon the muscles of respiration. The wounds were carefully closed by adhesive plaster, but union by adhesion did not occur, owing, probably, to the constant motion of the ribs in respiration. His recovery, however, was rapid and complete.

The following example of superficial punctured wound is remarkable for being accompanied with excessive dyspnoea, without the presence of air or effusion of any kind into the pleural cavity.

CASE II.—A woman was stabbed in a broil, on the 5th of June, 1835. The wounds were inflicted by a single blade of a pair of long bank-note shears. She received two wounds in her left arm while warding off the blows, and one upon the side of the thorax, this latter wound commencing near the inferior angle of the scapula, and terminating about five inches from its point of entrance.

I saw the patient within one hour after the receipt of the injury, and upon examination with a long probe found that the weapon had not entered the cavity of the chest. She was pale, alarmed, and her breathing was a good deal embarrassed. I applied a bandage to the chest, and left her. In about five hours I was called to see her again, and found the dyspnoea greatly increased; indeed it seemed to threaten absolute suffocation. At the same time I noticed also a slight trismus. I bled the woman from the arm, and then gave her opium. In the morning her breathing was somewhat relieved, but moderate trismus still continued. From this day her symptoms steadily improved, and by the seventh day the wounds had closed by first intention, and she declared to me that she could breathe as well as ever. I saw her often during the following year, and she never experienced any further trouble from the wounds.

The trismus and consequent dyspnoea were due in a great measure, probably, to an injury of the median nerve in the left arm; but the dyspnoea was no doubt in part also due to the direct injury inflicted upon the muscles of the chest by the weapon.

In the following case the weapon probably only entered the pleural cavity. If the lung was wounded at all, it could have been only slightly. The orifice was not closed; the wound discharged serum for some time, but recovery took place without the formation of pus.

CASE III.—On the 7th of Sept., 1852, Kennada, a watchman, was stabbed with a dirk-knife between the ninth and tenth ribs, on the left side of the thorax. Experiencing at first very little inconvenience from the wound, he did not apply for surgical aid until the third day after. I then found that the wound had not been dressed. No blood had ever been expectorated. Serum was discharging pretty freely from the open orifice. The probe entered the pleural cavity. He had now some pain in this side, and complained of a troublesome cough; his breathing was a little embarrassed. On percussion I found dullness over the depending portions of the pleural cavity, which was probably due to an effusion of serum. I permitted the wound to remain open, and directed him to be confined to a rigid diet and absolute rest. Three months later I found the wound healed, and no signs of thoracic lesions remaining. No pus had ever been formed in the pleural cavity.

In the following case the wound was left open also, and both serum and pus were formed in the pleural cavity:—

CASE IV.—Joseph Cook was stabbed with a butcher's knife Sept. 2, 1853. The knife entered about four inches

from the spine, on the right side, between the ninth and tenth ribs. The surgeon who saw it first very improperly probed the wound freely, his probe entering three inches and a half. There was considerable external hæmorrhage, and a severe pain over the right side for six or eight hours. He did not expectorate blood. It is probable that the knife penetrated the lung, but this is not certain. No means were taken to close the wound, which constituted the second error in the treatment of the case. On the following morning he began to cough, and in a few days the discharge of serum commenced, followed soon by pus. At the end of four weeks the wound had closed spontaneously. In about four weeks more the matter pointed near the old cicatrix, and was again discharged. About three months after the receipt of the injury I found the wound closed, it having remained open this last time only three or four days. No respiratory murmur could be heard over the lower portion of the right side; there was dullness on percussion, and the right hypochondriac region was prominent. No doubt the pleural cavity still contained pus. I advised that the wound should be opened again, but the patient declined to have it done. I have never heard from him since.

In the next case which I shall relate, the weapon penetrated the lung, and air was doubtless admitted into the cavity of the pleura, but, being immediately closed, no supuration followed, and a complete recovery took place.

CASE V.—A young man was stabbed by a butcher's knife in the right side of his chest, the weapon entering a little below the nipple. He immediately spat blood freely, and there was considerable hæmorrhage from the external wound. I saw this man within an hour after the receipt of the injury, and found him breathing with great difficulty. I closed the wound with adhesive plaster, and, as he was in full health, I bled him freely from the arm. A bandage was placed about his chest, and he was instructed to lie upon the wounded side. This instruction, however, he found it difficult to obey, since he was only able to breathe with tolerable comfort when he was sitting up. Opiates were administered from time to time for several days, and the bleeding was once repeated. A severe cough with the usual signs of pleuro-pneumonia followed, but from these he gradually recovered, without there having been any considerable effusion of fluid of any kind into the pleural cavity. The wound closed by adhesion, and remained closed. His convalescence was rapid and complete.

This case occurred in the first year of my practice, and as the man who had received the injury was a notorious villain, there was a very general desire openly expressed on the part of many citizens, that his wounds should prove fatal; and the nature of the injury seemed to encourage a reasonable hope that such a result would ensue. So far, therefore, from receiving credit for my success in this case, I was not a little chagrined and disappointed to find that my popularity was seriously impaired by the fact that I had lent my art and services to so bad a purpose.

PROFESSOR CASPER, of Berlin, the celebrated medical jurist, died on the 24th of February.

BROMIDE OF POTASSIUM is successfully used in the Metropolitan Free Hospital, London, in the treatment of certain forms of infantile convulsions. The pathological condition common to these cases is hyperæsthesia of the nerve centres, coupled with anæmia and complete absence of all symptoms of inflammation. The principal symptoms are an aspect of timidity and anxiety, talking in sleep, dreaming; countenance wan; tongue clean; pulse weak and irregular; fontanelle, if existing, *always* depressed; appetite good, often ravenous; bowels sluggish. These cases will not bear depletion. Opium, if judiciously administered, is often of service. The Bromide is given in doses of two or three grains, repeated every four or six hours. Its effect is generally rapid, one or two doses arresting the tendency to convulsion.

Original Communications.

DIFFICULT OBSTETRICAL CASES.

By GEO. T. ELLIOT, JUN. M.D.,

PROFESSOR OF OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN IN THE BELLEVUE HOSPITAL MEDICAL COLLEGE; OBSTETRIC PHYSICIAN TO BELLEVUE HOSPITAL AND THE LYING-IN HOSPITAL.
(Continued from page 184, Vol. VI.)

CASE CIV.—*Powerless Labor, with Rigidity—Ergot—Forceps—Mother and Child did well.*

DR. M. sent for me on the 15th of Nov., 1862, to Mrs. O., a primipara, aged 30. The labor had then lasted sixty hours, and was ushered in by rupture of the membranes and escape of the liquor amnii. The causes of delay were the unsatisfactory character of the pains and the rigidity of the soft parts. Ergot had latterly improved the character of the pains and advanced the head, but the patient was tired, and implored relief. Vaginal examination disclosed a left occipito-anterior presentation of the head, with the movement of descent completed. Vagina cool and moist; vulva much swelled. The coccyx was quite unyielding, though not ankylosed, nor yet pressed upon; perineum rigid and tense. Neither Dr. M. nor I could satisfy ourselves that we heard the foetal heart. Under these circumstances it was decided to apply forceps, in the belief that thereby the child, if then alive, would be saved, and that many hours of useless suffering would be spared the mother. As soon, therefore, as Dr. M. had thoroughly and promptly brought the mother under the influence of chloroform, I delivered her without lacerating the perineum. The child was a large-sized boy, and required alternate hot and cold bathing, etc., to revive him. Both did well.

CASE CV.—*Placenta Prævia—BARNES'S DILATORS—Forceps.*—DRS. Pulling and Wilson sent for me on the 20th of March, 1863, to see Mrs. S., a multipara, near the full term of her ninth pregnancy. One week previously she had consulted Dr. P. for uterine hæmorrhage, which was controlled by opium and ergot. It returned, however, on the 18th, and had continued moderately until the morning of the 20th, when she had flooded to syncope, and Dr. P. had been obliged to tampon the vagina. When I saw her she had been rallied by stimulants, and the flow was checked. She was pale, anæmic, nauseated, and of a highly nervous organization, but very weak withal, and much exhausted from the loss of blood. On removing the tampon a handful or more of clots were turned out from the vagina, and the flow continued. Vaginal examination enabled me to reach the head through the unruptured membranes, and to feel the edge of the placenta with perfect distinctness. It was detached, and was felt over the segment of the cervix, in front of the left sacro-iliac synchondrosis. The os uteri was so dilated that its diameter would measure less than one and a half inches, and *entirely undilatable*, a fact which we all appreciated. Dr. P. recognised the foetal heart on the right side of the uterus. There were no uterine contractions. It was thus evident that we had to deal with serious difficulties. The alternatives were: 1st. Rupture of membranes in hope that, with the induction of uterine contractions, the head might act as a tampon, and meanwhile re-tampon the vagina. 2d. To detach the placenta and be guided by the effect on the flow. 3d. To introduce a sponge-tent within the cervix, with or without previous rupture of membranes, and then tampon the vagina. 4th, To introduce Barnes's dilators, and deliver so soon as the cervix was sufficiently dilatable.

The first plan was too uncertain in the dangerous condition of our patient; the second was contra-indicated by the state of the foetal heart; the third was a measure on which I had relied with safety before Barnes's plan had been introduced; but now it seemed to us all that the dilators should be tried. Accordingly I introduced the medium-sized one

of the three which had recently been sent me from Weiss's, in London. Its introduction was unattended with difficulty, and it was carried between the head and the anterior-uterine wall, detaching the membranes to some extent, in all probability. The syringe attached was affixed before the introduction, and the dilator distended by cool water. In two hours we all met again; meanwhile Dr. P. had once changed the water. The dilator had not been displaced by her straining efforts in vomiting, nor by her alterations of position. The hæmorrhage had been controlled. The os uteri was now dilated to such an extent that version was possible. The foetal head had not been displaced. On removing the instrument clots followed, which we estimated to amount in quantity to the volume of two or perhaps three distended leeches. Uterine contractions had now set in. While we were deliberating on the next step to pursue, the hæmorrhage re-commenced. The alternatives were now: 1st. To introduce the largest-sized dilator, and fully expand the cervix. 2d. To deliver now by version. 3d. By forceps. Careful examination showed that, while the cervix was not fully dilated nor fully dilatable, it would yet admit the hand, and Drs. P. and W. inclined to version. On listening now for the foetal heart it was found to be inaudible, and hence the necessity for prompt interference became imperative, in the hope that it might yet be faintly beating. The patient was somewhat under the influence of the stimulants we had given her, and this was the only anæsthetic she took, as she was so weak from loss of blood. *Introducing my hand (except the thumb) within the cervix, while the head was steadied at the pelvic brim by Dr. Pulling*, I resolved to deliver with the forceps, and having introduced the blades *within* the cervix, and locked them with some difficulty, so as to seize the head in the diameter from the left brow to the right mastoid process, I drew the child into the world. The cervix was so undilatable that it seemed to me likely that it might have to be incised, *as it came down before the head instead of dilating*; but by pressing upwards the anterior lip strongly, while I drew, it gradually allowed the head to pass. The child weighed 6½ lbs., and was still-born, not the slightest pulsation of the cord or heart occurring. The placenta weighed a little over a pound, and its maternal surface was remarkably pale, having a boiled look. The portion that we had touched was very recognisable. Microscopic examination showed it to be healthy.

On reviewing the case it seems to me one to which the advantages of Barnes's dilators were specially adapted, and their use warranted the expectations which I had formed of them. They combine singularly well the desirable requisites—viz. facility of introduction, facility of retention, hydrostatic pressure, application of cold, compatibility with frequent vaginal examinations, comparative safety against internal uterine hæmorrhage. They seem to me liable to invite one risk which did not happen here, viz. that of change of presenting part through the agency of foetal reflex irritation; and this, which is the only disadvantage which I can conjure up against them, is of course utterly insignificant when weighed against the complications of placenta prævia with hæmorrhage of an alarming character, in a case where the os is entirely undilatable and the child alive and viable.

The rapidity with which the dilatation was effected (two hours) was also an advantage of no small moment, and we were all delighted with the easy, equable, and prompt manner in which the undilatable os was forced to yield. In my experience, when a multiparous os uteri is as undilatable as this was, after such great loss of blood, it is extremely apt to prove rebellious to treatment; and it must not be forgotten that in this very case it retained its undilatable character to the last, and yielded reluctantly to the traction of the head by the forceps. The perineum and other soft parts interposed no obstacle whatever.

In using the words "Barnes's dilators," I do so advisedly, and without ignoring the claims of Dr. Arnot, Dr. Keiller of Edinburgh, Dr. Storer, or M. St. Tarnier to pri-

ority in the introduction of the principle involved. I received one of Dr. K.'s instruments from Edinburgh some years ago, but the very advantageous modifications by Dr. Barnes, so important for the successful use of the remedy, and the powerful influence which his advocacy of the method has lent to its adoption, alike entitle his name to be associated with the valuable instrument which I employed on this occasion.

During the month of May I saw Mrs. S., in consultation with Dr. Wilson, on account of her anæmic and exhausted condition, for which we united in recommending iron, tonics, and a change of air. The uterus was well involuted and normal, and condition in all other respects satisfactory. She subsequently d.d well. I have caused these dilators to be made by Wade and Ford.

CASE CVI.—Puerperal Eclampsia—Albuminuria—Uterine Douche—Forceps.

On the 25th of March, 1862, I was sent for in consultation with Drs. M. C. and B., to see Mrs. M., a multipara, about forty years of age, near her full term, with puerperal eclampsia, associated with albuminuria. She was very feeble, unconscious, and without any of that physiognomy often found in cases of convulsions dependent upon uræmia. She had been many times convulsed without regaining consciousness in the intervals, nor indeed did it ever return. The cervix uteri had been undilatable and the pains ineffectual. The warm uterine douche had been used by Dr. M. with the effect of procuring a certain amount of dilatation which would yet, however, scarcely authorize an attempt at version. The foetal heart was beating, and the head presenting and felt to be entirely within the cervix. Her condition demanded prompt measures of relief, and, in the judgment of all the consultation, the choice of operative measures lay between forceps and perforation; nor was much hope felt that forceps could possibly be applied. With the permission of all, I carried my forceps entirely within the partially dilated cervix, and succeeded in locking them upon the foetal head, after which I dilated the cervix by drawing the head steadily and firmly upon it with the forceps, and delivered a living child. The mother remained unconscious, sank steadily, and died within twelve hours. The child was spoon-fed, and died within a week old.

CASE CVII.—Albuminuria and Convulsions in the First Confinement—Persistence of Renal Symptoms—Induction of Premature Labor in Second Confinement, three years later, by the Douche.

Mrs. — was attacked with puerperal convulsions in August, 1859, when she had reached about the eighth month of her first pregnancy. She was bled, and was safely delivered a few days afterwards without assistance. Chloroform was given. Previous to her departure from the city, I had made a number of examinations of her urine, both chemically and microscopically, and these had also been made by Dr. Gouley, without the discovery of anything abnormal. Still I requested, if the family should notice any puffiness of the face, that some urine should be sent me by express, for examination. This was not done, although puffiness of the face was distinctly observed before the convulsions came on; and for many months after her confinement the urine was more or less albuminous, and presented granular casts, with renal epithelium attached, some of which presented a few oil globules. I have made, with the assistance of Drs. Gouley, Alonzo Clark, Wm. Henry Draper, and Austin Flint, jr., a great number of examinations of this patient's urine during the last three years, and the result has never been such as to make me feel comfortable regarding the risks of a second pregnancy. During the interval which elapsed from the first confinement to the second, Mrs. — was the subject of "ulceration" of the os and cervix uteri, with leucorrhœa, from which she was entirely relieved by the nitrate of silver, vaginal injections, and invigorating treatment. Iron disagreed with her, and though carefully tried in many forms and in small doses, could never be steadily

relied on as an element in the treatment. The skin was always kept warm, warm baths used, and during the first winter after her confinement, dry cups were occasionally applied over the kidneys when any pain was complained of in that region. In the autumn of 1861 her general appearance was better than it ever had been—color, appetite, strength excellent; and she became pregnant in the winter, her last menstrual period terminating.

Examination of urine by Dr. W. H. Draper, Feb. 7, 1862. Patient had then been suffering from a severe headache. (I may mention that the usual phenomena of nausea occurred.)

Morning urine—specific gravity, 1013, and a trace of albumen. By microscope, nothing but pus cells.

In this instance it was thought that there was enough pus to account possibly for the albumen. In the other examinations recorded this was not the case. Very many examinations of urine which disclosed no evidences of disease, chemical or microscopical, would be of low specific gravity.

In the beginning of June, Mrs. — left town for the summer, feeling and looking well; nor did she suffer from anything unusual until the middle of July, when disagreeable but not serious head symptoms troubled her, and she sent me some urine, which, by mistake, was not examined, and the symptoms soon left. On visiting her in the country I found her looking well—no œdema, puffiness, or outward sign of trouble—and obtained some urine, which was examined by Prof. A. Flint, jr., and found to be albuminous, and to contain two transparent casts, with some few epithelial cells. Two or three oil globules were attached to the casts, and one gave a measurement of one-fifteenth-hundredth of an inch. There were also some crystals of the oxalate of lime.

Mrs. — now came to town, as she had some threatenings of labor, which soon disappeared, and two specimens of urine, one evening and one morning, were obtained. Both of these were quite albuminous, markedly so when nitric acid was added to the urine after ebullition had taken place. One was examined by Dr. W. H. Draper, who found a specific gravity of 1010, shrivelled, degenerate, renal epithelium, numerous pale, transparent casts, and a few slightly granular, with granular epithelium attached.

Under these circumstances, I decided to induce premature labor. It seemed to me that such was my duty, for these reasons:

1. The child was fully viable and living.
2. It was established incontrovertibly that the kidneys had never entirely rallied from the albuminuria in the first confinement; that they now presented evidences of grave disease; and that there was sound reason for believing that these symptoms, which had baffled so much care already, would increase in direct ratio to the duration of gestation.
3. That in addition to the immediate risks to mother and child from the effects of the albuminuria, there were the greatly increased risks to her future health from the further persistence of the causes which had already proved so hurtful in her first labor, and which were likely to prove so much more serious now when the kidneys were weakened by previous disease.
4. That the induction of labor by the douche was not dangerous, when properly performed, and offered the advantages of greatly diminishing the chances of undilatable os, which I believe to be especially liable to occur to women who have albuminuria, and who have suffered from long standing ulceration and inflammation of the cervix.

My opinion was then given to the husband, and my willingness to consult with any physician on the subject fully set forth. He decided that he did not wish a consultation, and that I must act as I deemed best. After waiting several days, during which time Mrs. —'s primæ viæ were carefully attended to, the urine remaining unchanged, and all parties consenting, I gave the first douche on the 30th July, 1862, at about 5 P.M. At this time the os was high up and far back, not dilatable, barely admitting one finger. The vagina was not at all relaxed, and rather dry. The foetal

heart was audible everywhere, though less so on the left side, where it was masked partially by the uterine souffle. Thus I could not satisfactorily determine the site of the summum of intensity. The head was distinctly recognisable through the anterior wall of the cervix, a suture being also distinguishable. I injected about five-sixths of a large pitcher of warm water, with Davidson's syringe, against and within the os, which was dilated enough before the conclusion to allow me to corroborate my diagnosis of the presentation; and the opportunity was embraced of drawing down the os so as to bring it more readily within reach of the douche, and to increase the prospects of its dilatation by the descent of the membranes. Labor pains set in promptly, and continued through the night, so as to prevent her from sleeping. At 5 A.M., July 31st, I made an examination, and found that the right thigh was now across the os uteri, this latter being larger than a dollar, and dilatable; membranes unruptured. The knee was to the left side of the os, the ilium within reach of the finger introduced within the cervix on the right side. The head could be felt in the epigastric region. Foetal heart beating. This disagreeable complication had been alluded to by me in a conversation with Dr. Thomas before the labor, as a contingency more likely to happen in a premature labor, though certainly it surprised me none the less when it occurred.

When living in the Dublin Lying-in Hospital, in 1849, in a case of deformed pelvis, the head was perforated; after a consultation by Dr. Shekleton with Johnson the former Master, Evory Kennedy, George Johnston, Collins, McClintock, Harrison the anatomist, and Sir Philip Crampton, it was decided to let the head remain a couple of hours to mould itself to the brim. At the expiration of this time the head had gone up on the right side of the uterus, and the arm was found in the vagina.

Such a "culbute" or "rope-dancer's trick," as Hunter called it, as happened here, has not occurred in my experience, though much more striking ones are recorded by the best authorities; perhaps no one more so than that recorded by Depaul in his "Traité d'Auscultation Obstétricale," Paris, 1847, page 318, where Depaul, Madame Callé, sage, femme en chef, Dubois, and Cazeaux recognised by the touch that, in a woman eight months and a half gone, the head was recognised to present in the morning and the feet in the afternoon; and some time later in gestation the head again presented, and the delivery was then effected. In that case, these variations in the presentation were not caused by uterine contraction. In my case the alteration was not effected by the douche, for I felt the head after that was completed, and I do not know the stimulus for such reflex action. My patient was now quite restless and excitable for one possessing such a remarkable degree of self-control; and I concluded to put her under chloroform, give another douche, and see what had best be done. Accordingly I sent for Dr. Thomas, who arrived about 7 A.M., when, after she had been brought under the influence of chloroform, he came into the room and kept up the anaesthesia. Having placed her in the obstetric position, and confirmed my diagnosis of the new presentation, I proceeded to endeavor to turn by external manipulation, and succeeded in changing the position so far that the finger well introduced on the right side, within the cervix, touched the knee in the place where the ilium had been. But this was the extent to which the version could be effected, and I accordingly replaced the thigh by pressure through the right side of the uterus, and fully dilated the os by a small douche and the use of my fingers. She was then replaced in bed, and the chloroform kept up. In about an hour the membranes broke and the right knee came near the vulva, when we again replaced her in the position for forceps; and these being ready, but not needed, I succeeded in delivering a living, well formed male child, weighing about seven pounds, without the loss of a moment. The cord was three times around the neck, and was rapidly disengaged.

The child seemed at first indisposed to breathe, but the cord pulsated well, and after much less than the customary effort in such cases, Dr. Thomas and I considered that he would do well. He was dressed, brought to receive the mother's kiss, and when I went to breakfast at eleven (leaving the sluggish uterus to Dr. Thomas's care, as it still required holding), I had the happiness of feeling that the case had proved a perfect success. The nurse then sent for me to say that the child was blue, and on examination Dr. Thomas and I feared the worst. The right leg, thigh, and arm were bluer than the others, but the marks of universal dermoid congestion were everywhere apparent. The respiration was feeble in inspiration and prolonged in expiration; the epigastric pulsation unduly marked, and attributed with correctness by Dr. Thomas to the engorged right side of the heart. Some comparative dulness was apparent in the left chest anteriorly. Stimulus by enema, as the child would never swallow; friction, warm and cold baths, sprinkling, and the persistent use of Marshall Hall's method for some hours, would rally but not permanently benefit the child. We sent for Dr. Jacobi. He examined the child with his accustomed thoroughness, and stimulated the cutaneous nerves with great vigor, and with the effect of very markedly arousing the child for a time; but, as before, the lethargy and the prolonged expiration returned, and the child died between five and six in the afternoon, with a steady advance of all symptoms, except the coloration of the face, which became quite pale. The eyes opened an hour or two before death for the first time. No squinting, no paralysis.

Autopsy.—Twenty-two hours after death; weather quite warm. Blue coloration marked, except in the hands, which were white, the blood having left them by gravitation, as they were folded on the abdomen. Lungs congested, highly colored, collapsed. Left lung felt as though it had never been inflated in the upper lobe. They were readily blown up with the pipe. Pleuræ, heart and vessels, pericardium normal; liver congested but normal, as were the other viscera. Brain and medulla examined with great care, and without result. Blood examined for urea without result.

Mrs. — remained weak, with a sluggish uterus, somewhat restless, clear-headed. Beef tea, brandy, and ergot through the day; codéine at night. Catheter that night. Aug. 1st—Beef tea and oatmeal gruel. No stimulus. Codéine. Good night. Aug. 2d—Very comfortable day; codéine. Good night. Aug. 3d—Enema. Some clots. Breasts distended with milk. Since that time her convalescence was uninterrupted. She has subsequently suffered from a return of the old erosion of the cervix, for which she was treated for two or three months with perfect success.

Since that time, by thorough hygienic care, she has enjoyed very good health. The urine is now free from albumen and casts, and the chances of a third pregnancy are entitled to serious consideration.

IS YELLOW FEVER ENDEMIC IN NEW ORLEANS?

By GEO. M. STERNBERG, M.D.

ASSIST. SURG. U.S.A.

THE question whether Yellow Fever is endemic in New Orleans, or whether it is always imported, and can be excluded by a proper quarantine, has become one of great interest, not only to the profession but to the country, since the present war has necessitated the maintenance of a large army of unacclimated troops in and near this city.

Ten or fifteen years ago the belief was general among medical men in New Orleans that the disease was endemic, and that a quarantine would be useless. This belief, however, has been gradually losing ground, and the experience of the past three years has convinced nearly all that a rigid quarantine will completely shut out the disease.

No just conclusions can be drawn from the fact that Yellow Fever has prevailed in New Orleans at different times, from the establishment of quarantine up to the year 1861; for during that time there never was a sufficiently rigid quarantine to absolutely prevent the disease from being brought to the city.

A large trade was carried on with infected ports, and small vessels could come to the city by several different routes, the Mississippi river being of course the main one. The cargoes of fruit from Havana and other ports would be ruined by the detention of the vessel for a safe period at quarantine, and every means was resorted to by the masters and owners of vessels to avoid the laws. There is reason also to believe that vessels were often allowed to come to the city without detention, through the influence of members of the Board of Health, which influence was obtained by means of bribes. During the summer of 1861 there was no Yellow Fever in New Orleans, the blockade of the port by our navy being the most effectual quarantine the city had ever known.

When Gen. Butler's forces took possession of the city, the Southern press at once endeavored to soothe the feelings of the people by assuring them that they had an ally in Yellow Fever which would soon drive the Union Army from the soil of Louisiana. Two summers have now passed, and their hopes have been disappointed. The army is now in possession of a large portion of the State, and instead of being driven away by the disease, our Generals have shut it out from the city.

Since the occupation of New Orleans by the Federal forces, the Commanding General of the Department has assumed exclusive control of quarantine, and the Med. Director of the Department has acted as President of the Board of Health, and is held responsible for the strict enforcement of quarantine regulations. The present efficient Med. Director, Surg. R. H. Alexander, U.S.A., has acted in this capacity since Gen. Banks has been in command of the Department.

Dr. Baldwin, the present resident physician at quarantine, has been practising in New Orleans for many years, and was the first to occupy his present position when quarantine was established. He is one of the loyal men of New Orleans, who welcomed the Union forces upon their first arrival in the city. I do not know whether or not any cases of Yellow Fever occurred at quarantine in the summer of 1862, but the city was entirely free from it. On the Fourth of July, 1863, the Spanish man-of-war Pizarro arrived at quarantine, and the vigilant resident physician, in his examination, discovered cases of Yellow Fever on board of her.

Every effort was made by the commander of the vessel and the Spanish Consul at New Orleans to obtain permission for the vessel to come to the city; but they were assured that it would be allowed to come no further until at least thirty days had elapsed after the last case of Yellow Fever occurred, and the vessel was thoroughly fumigated. The Pizarro therefore put to sea again with Yellow Fever still on board, after having remained at the station three weeks. There were fifteen cases landed from this vessel and treated in the hospital at the station. Of these three died. About the fifth of October, cases of Yellow Fever occurred on some vessels of our Navy, which had recently communicated with vessels at Pensacola and off Mobile, that had the disease on board.

The fact that the disease was then prevailing in the blockading squadron was not known at this time to the authorities in New Orleans, and the first intimation of it was received when it made its appearance on the Holyhock, which was then lying in the river in front of the city. The vessel was at once sent to quarantine. When she arrived, there were three dead on board, and four afterwards died out of twelve cases. The disease soon after made its appearance on the Fear Not, the Pensacola, and the Estralla, all of which were sent to quarantine. Fortunately it was so late in the season that the disease did not spread any

farther in the navy, and not at all in the city. The last case occurred late in October on the Estrella. Should an epidemic of Yellow Fever occur in New Orleans while our hospitals are filled with patients suffering from chronic diarrhoea, malarial fevers, etc., its ravages would probably be fearful; but I think the country has little to fear from it while the present efficient officers have control of quarantine.

Cases of bilious remittent fever occasionally occur, which so closely simulate Yellow Fever, that the attending physician may be easily deceived unless he is perfectly familiar with the latter disease. Two such cases occurred in the summer of 1862-3, and were reported as cases of Yellow Fever; but a consultation of some of the most distinguished physicians in the city pronounced them severe cases of bilious remittent; and a microscopical examination of the matter vomited proved that it was not the characteristic black vomit of Yellow Fever. I also heard of one or two cases of a similar nature occurring in Baton Rouge, which were mistaken by the attending surgeon for Yellow Fever.

RESECTION OF THE ELBOW-JOINT, FOR GUN-SHOT FRACTURE:

CONDITION OF THE PATIENT SIXTEEN MONTHS AFTER
OPERATION

By WM. O'MEAGHER, M.D.,

SURGEON SIXTY-NINTH N.Y.V., IRISH BRIGADE.

JOHN MURTHA, private Co. B, 69th N.Y.V., Irish Brigade, was wounded on Mary's Heights, Fredericksburg, December 13th, 1862, by a minié rifle-ball passing through the right elbow-joint antero-posteriorly, while in the act of firing off his own musket, fracturing the upper portion of the radius to the extent of about an inch, the condyles, and a portion of the shaft of the humerus, and finally shattering his comrade's musket.

He conveyed himself to the rear, and was examined in one of the depôts at Fredericksburg, when it was decided to amputate the arm; but he opposed it so resolutely that simple dressings only were applied, and he was sent with others to Washington.

He was admitted to Armory Square Hospital, under the care of Dr. D. W. Bliss, who, finding him still resolutely bent on retaining his arm, performed excision, removing in the operation the fractured end of the radius, the condyles, and a portion of the shaft of the humerus, the ulna and its olecranon process being left intact. Three months afterwards he was discharged from hospital, and attached to the Invalid Corps, in which he remained eight months, and was then returned to his regiment with a view to his discharge from service.

At present, and ever since the wound of operation healed, there is perfect mobility between the two sections of the arm, no union, either osseous or ligamentous, having been established between the segments, with a well defined interval of about three-quarters of an inch between them.

In the immediate vicinity of the wound, the muscles and other soft tissues were wasted to a considerable extent; the forearm, however, is well developed, but soft and congested, owing, I presume, to rather elaborate bandaging, apparently of his own origination.*

I believe I need not observe that his arm is nearly useless, the forearm dangling loosely; there is, however, considerable power of prehension left in the hand, by means of which he can pick up light articles, but not flex the forearm to any appreciable extent.

ABSORPTION OF IODIDE OF POTASSIUM.—A memoir by M. Deschamps goes to prove that friction with an ointment is a very good way of introducing iodide of potassium into the system. He found that more was absorbed by this means than when a bath, with a much larger quantity of iodide, was employed.

* When the forearm is flexed and the upper extremity of the ulna made to approach the humerus, the lower extremity of this crosses the olecranon process, which remains external, though quite contiguous.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, April 6, 1864.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

CEREBRO-SPINAL MENINGITIS.

DR. DETMOLD read an account without comment, of a case of cerebro-spinal meningitis, called also spotted fever, occurring under his observation, after which Dr. W. H. Draper read a portion of an interesting paper which he is preparing on the same disease. His paper is founded upon a somewhat lengthy and careful observation, principally in the neighborhood of Carbondale, Pa., where the disease has been raging to a fearful extent. As the paper is not yet completed, no analysis of it can be given at present. DR. SKIVEN, of Long Branch, N. J., being present, by invitation, proceeded to address the Academy at some length, giving a minute description of the disease as it appears in his locality. The neighborhood where the disease has occurred with the greatest degree of severity is but a short distance from the sea-shore. The climate during the winter has been mild, there having been no storm from the ocean until some time in the month of March. The ground is generally dry, there being no marshes or swamps that are not covered by the tide. The spring and well water is more or less impregnated with chloride of sodium and the salts of iron. The mode of living is varied, there being no uniform system of diet, either in meats, drinks, or vegetables. The population is composed of different classes, from the poor laborer to those in easy circumstances; all seem happy and contented, and enjoy life much. From these facts there seems to be no known cause from soil, climate, or mode of living, by which we can account for the appearance of the disease. It was observed that as soon as this disease appeared all other diseases disappeared, or seemed to be swallowed up in this. During last winter measles prevailed to an extent and degree of severity hitherto unknown. It attacked persons of all ages, from the young child to the old man of seventy. In past years this has invariably been followed by scarlatina; but this year it was not so; upon the disappearance of measles from the neighborhood, cases of cerebro-spinal meningitis began to appear. The first symptom of the disease has generally been a severe pain in the knee, sometimes in the hands, and attended by what the patient describes as "pain in the bones," extending along the direction of the limb. After a short time, or in some instances a day or two, the pain leaves the limbs and attacks the head, from which it extends to the back of the neck, and continues down as far as the lumbar region. This, like the pain in the limbs, is aggravated more by motion than pressure; indeed, every attempt at motion is attended by the most intense pain. If the patient can be seen at the commencement of this stage of the disease, he is bled freely from the arm, leeches applied to the temples and mastoid processes, cups to the back of the neck and along the spine, followed by mustard applications and the administration of a brisk cathartic. Before Dr. S. commenced this treatment, he lost a majority of his patients; but since he began to bleed early, a much greater proportion recover. Later, when stimulants seem to be indicated, he has found equal portions of capsicum and camphor in powder, to be attended with a better effect than any of the diffusible stimulants. The prejudice of the inhabitants is against autopsies, consequently the advantages for studying the pathology of the disease are limited. Dr. S., however, exhibited some specimens, consisting of a portion of the dura mater, one of the stomach, and one of the bladder; these all appeared to be in a very high state of congestion. The spots, from which the disease is sometimes called "spotted fever," Dr. S. regards as accidental, being simply spots of ecchymosis caused by rupture of some of the small vessels during the stage of reaction. It was an-

nounced that this subject would be continued at the next meeting, after which the Academy adjourned.

American Medical Times.

SATURDAY, APRIL 23, 1864.

SANITARY CONDITION OF WASHINGTON.

THE sanitary condition of the national capital is a disgrace to the local authorities, and a reproach to the general Government. Though favorably situated for drainage and cleanliness it is neither drained nor cleaned. Standing waters, filled with sewage and exposed to the sun, are located in the very heart of the city; the streets are filthy in the extreme; alley-ways and open courts are unpoliced, and a floating population of soldiers and contrabands occupy its suburbs. To the stranger the town seems given over to the undisputed reign of the demon *filth*. Washington has long been ripe for epidemics, and it is only surprising that they have not long since been spontaneously generated. During the last winter small-pox made its appearance, and its general and undisputed prevalence reminds us of the history of that disease previous to the period of inoculation. In Washington and Georgetown there were under treatment in the month of last January, 1480 cases of small-pox. It spread to the upper ranks of society, and finally the Executive of the nation suffered an attack. The epidemic was controlled by the general vaccination practised. The public alarm was very great, and the epidemic was made the subject of Congressional inquiry. The Medical Society of the District of Columbia appointed a Committee to report on the epidemic and on the sanitary condition of the cities of Washington and Georgetown, Dr. THOMAS ANTISELL, Chairman.* The Committee's report enters fully into the consideration of the local causes of disease, and the necessary preventive measures. They state that the increase of the population since 1861 has so crowded the hotels and boarding-houses, and even private dwellings, as to engender animal poison, yet to place the inhabitants by mere position in the circumstances most likely to receive any epidemic or contagious disease which may approach them; the crowding of the community also tends to disregard of cleanliness in the hotels and other dwellings; and when once a case of disease occurs in a house the fomites remain in apartments ready to attack any new comers. There has also been a transitory and migratory population of excessive numbers unsupplied with dwellings. The various small camps of quartermasters' men, of commissaries and other officers attached to the army, which are distributed not only on the outskirts of the city, but many of them in the heart of the town, on vacant lots, are so many causes of the origin of disease; animals by the hundred are corraled and encamped for longer and shorter periods in the northern and western squares of this city—the food and excreta lying on the ground with little attention to cleanliness—the ground not being cleaned even after the camp has been abandoned—the men sleeping in

* Medical Society of the District of Columbia. Report on the Sanitary Condition of the Cities of Washington and Georgetown. Presented to the Society, March, 1864. Adopted and ordered to be printed. Washington, D. C. 1864.

tents, with neglect of cleanliness, either personal or public. All these conditions inevitably tend to produce disease. Never has typhoid fever been so rife as since the fall of 1861; and to these causes are attributed also the origin and extent of the epidemic of variola. Many of these subjects were teamsters and contrabands, among whom small-pox generally exists.

The streets are described as filthy in the extreme, the dirt having accumulated in many to the depth of twelve inches. The material allowed to accumulate in the streets and side drains is of the most putrescible character. The back-yards of small dwellings, the lanes and alleys where the humbler class dwell, are filled generally, especially in winter, with like deposits. The interment of horses which have died in the district is made outside of the city, at very small distances; the burial of these animals is very imperfectly performed, the limbs often exposed and decomposing in the air, so light a covering over the pit that the gaseous products of decomposition are not absorbed or retained by the earth, and the air is contaminated by the odors arising therefrom. The Committee very justly remark: "Where the District is unhealthy by presence of an epidemic, the latter does not merely affect its own population, but that of every other Eastern city. Few cities have more transient visitors than Washington, and it has happened once, and may occur again, that valuable lives of citizens coming from a distance have been sacrificed to the neglect of hygiene in our midst; and that by this neglect our District, which was intended by the general plan to be the healthiest of localities, may become a pest-house and a by-word."

The Committee recommend in regard to small-pox, thorough vaccination, the quarantining of infected persons, and the prevention of their conveyance in public hacks. For the permanent relief of the two cities, they propose that a Board of Health or a Bureau be established to take charge of all matters relating to the public health and well-being of the District—a Board in which the interests of the Government and the public would be represented and protected. They state that there is an immediate necessity for such a body; for the Board of Health of the city of Washington, as at present organized, does not accomplish the object for which a Board should exist, and in the sister city of Georgetown no Board of Health has ever existed. They would give the Board an Executive officer acting as a superintendent of public health, and a Sanitary officer for each ward of the city—the latter officers to be medical men in great part, and selected from the most eligible in the profession. It should be invested with power to visit localities, transfer sick to hospitals, purify apartments of the poor, have nuisances removed, see that vaccination is carried out, and generally to be intrusted with enforcement of sanitary regulations.

It is to be hoped, for the good fame of the United States, that the suggestions of this truthful and able report will be heeded by the authorities, civic or national. Washington, with its wide and well-graded streets, may be made one of the most cleanly and beautiful cities of the country. The recent epidemic, and the danger of one still more destructive, should move the citizens to demand immediate legislation in their behalf. And nothing but an independent Board of Health, with a large and intelligent medical element and the proper subordinate medical officers, can meet the present demands of sanitary science.

CITIZENS' ASSOCIATION AND HEALTH REFORM.

THE Citizens' Association of New York lately sent a Committee to Albany to urge the passage of a Health Bill through the Legislature. The Committee, consisting of EDWARD S. JAFFRAY, DR. WILLARD PARKER, and ROBERT B. ROOSEVELT, report that, in conjunction with DR. JAMES ANDERSON of New York, DR. THEODORE L. MASON of Brooklyn, and DR. W. C. ANDERSON of Richmond County, they attended at Albany on the 15th and 16th of March, 1864. The bill which they approved was to the following effect: That the Counties of New York, Kings, and Richmond, should constitute a health district, under the control of a Board of Health, composed of four medical men, and four citizens; the Mayors of New York and Brooklyn, the President of the Police Commissioners, and the President of the Board of Supervisors of Richmond County, *ex-officio*; that the members, except those *ex-officio*, should be appointed on nomination by the Governor, and approved by the Senate, and that the Board thus constituted should have entire control of sanitary matters in the three counties, including the regulations of quarantine and the supervision of the streets, and should have all the powers at present vested in the Board of Health, the Commissioners of Health, and the City Inspector. They pointed out the disadvantages of the present system, and the necessity of having adjacent counties, so intimately connected as Richmond, Kings, and New York, under the control of one Board, and the propriety of having a certain proportion of medical men at the head of a Sanitary Commission, and exposed the present unhealthy condition of the city, with the apparently threatening danger of greater disease during the approaching summer. They showed the futility of the best sanitary measures to prevent pestilence in Brooklyn, if they were not enforced in New York, and the risk of importing infectious disease into both cities, if proper regulations were not observed at Quarantine. The Committee, however, found that the Democratic members of the Legislature regarded the proposed act as aimed at their friends, and that the Republican members dreaded the odium of passing so sweeping an act that might be construed into unjustifiable party interference in city affairs, and might injure their prospects in the next Presidential election. They were informed that the City Inspector had raised large sums from his employes to defeat the measure, and, as there were already nine hundred bills before the Assembly, your Committee came to the conclusion that further action had better be deferred till next session, when doubtless an early application will be successful. They found that, in the opinion of many members of the Legislature, the death of five thousand citizens was not so serious as the possibility of a Presidential defeat.

TRIUMPHS OF MECHANICAL SURGERY.

MECHANICAL dentistry is but another term for mechanical surgery. It remedies congenital or acquired defects of the oral cavity by mechanical appliances. To the scientific conservative surgeon no branch of his art is more important than that which aims to accomplish, by nicely adjusted apparatus, what was formerly attempted by an operation, or to supplement the deficiencies of that art. An interesting instance of the value of scientific mechanical dentistry has been brought to our attention, and its triumphs over the best devised operation is most marked. The restoration of congenital cleft palate has always proved a most unsuc-

cessful surgical operation. Even if the fissure was successfully closed the defect of speech was not improved materially. DR. KINGSLEY, a dentist of this city, has, for several years, made the cleft palate a subject of special study, and his labors have been rewarded with success. DR. STEARNS, of the U. S. Army, who, in his own case, adapted an apparatus which completely relieved the defect, was the first in this field. But his apparatus was never successfully applied in other cases. DR. KINGSLEY has effectually completed the work undertaken by DR. STEARNS. His method is to take a mould of the defective parts, and to this adapt the instrument. The material is vulcanite. We have seen several persons wearing this apparatus, and the improvement in the speech was most satisfactory. The invention of DR. K. must be regarded as a great triumph of mechanical surgery.

FEVER IN BELLEVUE HOSPITAL.

THE Commissioner of Charities and Correction have determined to erect tents on Blackwell's Island for the treatment of the fever cases which apply for admission to Bellevue Hospital. This is a wise measure, and will be productive of the best results. Not only will the spread of the contagion be arrested, but the percentage of recoveries will doubtless be largely increased. We now learn that the building being erected on the grounds at Bellevue was not designed for a fever-hospital, as has been reported; and that the Commissioners have acted under the advice of the Medical Board in regard to the isolation of fever. We therefore misrepresented the motives of the Commission in our allusion to their action in a former issue, and take pleasure in acknowledging our error. We did not, in remarking upon the disregard of their medical advisers, refer to the Commissioners especially, but to the governing boards of hospitals in general. In matters of this kind, where the advice of the medical officer is of great importance, too often it is either not sought or entirely ignored. The grossest errors in hospital management, in this country and abroad, have arisen from neglecting to consult those who are alone competent to give a rational opinion. If it is a question of hospital construction, an architect furnishes every detail; if of ventilation, a mason is consulted; if of heating, an engineer is summoned. On all these subjects the medical officers of hospitals should also be consulted; and we deem it our duty to comment with just severity upon the actions of governing boards which overlook or ignore their proper medical advisers. We take pleasure in stating in this connexion that the Commissioners of Charities and Correction have uniformly acted with a liberality and courtesy towards the medical staff under their direction rarely witnessed in similar institutions. And we are glad to learn that their present action is not an exception, being in accordance with the advice of the Medical Board of Bellevue Hospital. The Commission has aimed to render the public institutions of New York models of excellence in all that pertains to external and internal management, and their efforts have been crowned with eminent success.

ASSOCIATION OF MEDICAL SUPERINTENDENTS OF INSANE ASYLUMS.

THE eighteenth annual meeting of the Association of Medical Superintendents of American Institutions for the Insane is near at hand. It is announced to be held at Willard's Hotel, Washington, D.C., on Tuesday, May 10th, 1864, at 10 A. M. We took occasion, in noticing the proceedings last

year, to suggest some changes in its organization, by which its efficiency and influence would, in our opinion, be much increased. As now constituted, it is an ephemeral assemblage of actual superintendents of asylums only. To become a working *psychiatric society*, permanent organization and membership are essential. Its members should include, not asylum superintendents merely, but other medical officers of hospitals for the insane, and physicians who make mental alienation a subject of investigation. Intimately interwoven, also, as are questions of insanity and law, the members of the latter profession, who are concerned in medico-legal research, should have a like representation. Thus brought in contact, and engaging in discussion with specialists proper, the jurist would gain more correct views of the phenomena of insanity; and the light thus acquired would be reflected back in better instructed opinions from the bench. We would suggest to the Association that the interests of the specialty they represent would be promoted by a greater number of original papers, and a less amount of desultory discussion than has characterized many previous meetings. The minor details of hospital management and internal arrangement may well allow an informal interchange of individual experience and opinion, but the higher range of psychological topics does not admit of such extemporaneous treatment.

ANNUAL MEDICAL REGISTER.

WE insert in another column the prospectus of a second number of the *Annual Medical Register*, of New York, originally projected and edited by the late DR. GEO. H. TUCKER. It is to be issued under the editorial supervision of DR. GUIDO FURMAN, and will embrace a large amount of statistical information of interest to the physicians of the city. It is a most praiseworthy enterprise, and should be well sustained by the profession.

Reviews.

A MANUAL ON EXTRACTING TEETH: founded on the Anatomy of the Parts involved in Operation; the Kinds and proper Construction of Instruments to be used; the Accidents liable to occur from the Operation, and the proper Remedies to relieve such Accidents. By ABRAHAM ROBERTSON, D.D.S., M.D., Author of Prize Essay on Extracting Teeth, etc. Philadelphia: Lindsay and Blakiston. 1863. Pp. 198.

EVERY country practitioner is interested in the subject of this work. Extraction of the teeth becomes a necessary branch of his business, and a manual containing practical and recent information relating thereto can but be acceptable to him. This work is divided into eight chapters, which severally consider all the different points bearing upon the extraction of the teeth. Passing over the first chapter, devoted to introductory remarks, and the second, to the anatomy of the jaws and teeth, we have in the third *the pathology of toothache* treated of at length. The causes of toothache are discussed under the following heads:—1. Exposure of the nerve; 2. Inflammation of the nerve; 3. Inflammation of the periosteum; 4. Inflammation of its dentine; 5. Sympathy; 6. Exostosis; 7. Accidents. This chapter will be read with profit by every practitioner. All the forms of toothache with which we are daily made familiar are clearly explained, and the proper methods of treatment indicated. The fourth chapter relates to *instruments for extracting teeth, and the proper method of using them*. The turnkey, an "instrument of torture and of dread," is described, and

very properly discarded. The compound screw-forceps, so strongly recommended by many dentists, has not proved serviceable in Dr. Robertson's hands. The rules given for extracting teeth are very judicious. *Lancing of the gums* is the subject of chapter fifth. The author does not deem it important to use the lancet before extraction. In this he departs from the standard practice, and from the plain rule of common sense. It is not that the adhesion of the gum to the tooth offers resistance to extraction that this trifling operation is advised, but to prevent laceration. This laceration, in our experience, and in that of most other dentists, is far more frequent and severe than Dr. R. admits it to be in his practice. We do not accept, therefore, as judicious the author's advice to have "a good, plain, practicable instrument, but use it seldom." In chapter sixth the author treats of the *accidents attendant upon the extraction of teeth, and their remedies*; and in chapter seventh of anæsthetics. Popular as anæsthetics are becoming with dentists, we agree with Dr. R. in discountenancing their use.

In conclusion, we recommend this Manual to all who wish to be thoroughly informed in the art of treating tooth-ache, and especially by extraction. The book is dedicated to Prof. B. Fordyce Barker.

LEAVES FROM THE DIARY OF AN ARMY SURGEON; or Incidents of Field, Camp, and Hospital Life. By THOMAS T. ELLIS, M.D., late Post Surgeon at New York, etc. New York: John Bradburn. 1863. Pp. 312.

This is a sketch of the author's experience while acting in various capacities as surgeon during the organization of the first regiments in New York, and in the movements of the Army of the Potomac while in command of GEN. McCLELLAN. There are but few facts of interest to the profession scattered through the work, the author occupying himself principally with the details of battles.

FOREIGN CORRESPONDENCE.

LETTER FROM RUFUS KING BROWNE, M.D.

(Continued from page 157.)

THE BERLIN SCHOOL OF PATHOLOGISTS AND THEORIES OF PATHOLOGY.

BUT this doctrine does not account for the nature of other varieties of disease and morbid tissue. No; certainly not. But their pathological knowledge does include a correct account of these, and is as corrective of our previous notions of other various abdominal changes of tissue as the instance we have adduced. We only introduce this to exemplify the distinction between theirs and the prevailing doctrines—a difference which is equally great throughout the entire field of pathology. Of course these investigators run no crusade against exudation, or infiltration, or effusion. They observe that it is not true that such growths arise from exudation, and so of all other points of difference. And such must be the result of constant and laborious examination and investigation, year in and year out, day by day, and hour by hour, of diseased tissue—tissues upon which linger yet the warmth of retiring animation.

When one's experiences are fresh he notices with satisfaction the difference between an autopsy here, and one as usually conducted. Here it is an examination, a post-mortem analysis. The morbid changes in the tissue of an organ are recognised and appreciated without the slightest doubt, before any part has been microscopically examined. No matter how minute the change, if it be at all appreciable, it is at once understood and recorded. This, probably, from long-standing previous knowledge of the appearances in the case, is habit, which can only exist in perfection where the amount and variety of material one has before seen and is seeing, are very large.

Of course this exacts and presupposes an accurate knowledge of anatomy, not merely on the one hand of the

different organs, muscles, vesicles, nerves, etc.; nor on the other of the microscopic anatomy, or the histological elements in themselves, as presented in preparations; but of the appearances presented to the naked eye by the latter, when in combination in the body. When scanning an inanimate body, one is surprised by the reflection that every element of that body, no matter how minute, singly or alone, has, when in combination with countless other like elements, and still others of different and similarly minute characters in combination, in textural relation a characteristic appearance to the naked eye; and has its characteristic appearance in normal, and its characteristic appearance in abnormal state, appreciable by one or more of the senses. I can only here briefly illustrate what these are, for this is a kind of knowledge one must gain by experience, and without much help from instructors. He gets no help, indeed, in this particular, from anatomy as it is usually taught under the head of "general and descriptive," in the books, and demonstrated in the dissecting-room. Nor does he get it alone from histologies, or the microscopic drawings or preparations. He can only get it by continued familiarity of sight with both sound and unsound organs and tissues of various kinds. But get it he must, or he will never be an anatomist—at least not a pathological anatomist. I have known very good anatomists, of undoubted repute and equally good demonstrators, who were no more alive to the appearances forming the distinctions I speak of than their students were; and who were no more sensible of the appearances between an amyloid liver, or spleen, or kidney, and one devoid of these changes in its tissue, than if there never were any such changes. This is no reproach to them, nor meant as derogatory to their skill; for it was always a grateful sight to see their deftly done dissections and demonstrations of muscle and fascia, bloodvessels and nerves, tendons, etc. Theirs was the *skill* of the anatomist; the other is the proficiency of the pathologist. They are no more *united* here than there. But learn these ever so well, or learn ever so well the appearances usually recognised in autopsies as lesions of this or that organ, and the appearances I speak of characteristic of the elements of tissue *en masse* in organic bond, or in section, will be a blank at first. Nor will it help the student to become a proficient in the recognition of these appearances, to pore over sections under his microscope. That is only useful as a subsequent proceeding and research. As little would it advance his knowledge of forests to pore over the texture of a single leaf of a tree, while unacquainted by sight with the tree and the forest. As he must know the appearance of the forest, so must he those I speak of, pertaining to the tissues *en masse* of the human body. However familiar he may be with the microscopic view, this will not empower him to become an adept in the knowledge pertaining to the appearances of the tissues in question. To know these appearances and understand them (the latter being done by the microscope) constitutes proficiency in pathological anatomy. Undoubtedly all this proficiency, in whatever person seen, is the result of a thorough knowledge of the elements of human tissues acquired only by the microscope. Without this the anatomist would not be able to carry his knowledge of the case to a correct ultimate, and this is in fact the only distinction of this school over the Vienna, headed by Rokitsansky, and which enables them not only to take accurate account of morbid changes, but to explain by their microscopic knowledge the course of the change to morbid—at least in most cases.

But the most natural and yet the most hindering of all mistakes in this sort of work, is to suppose that we can make the microscope a *substitute* for the eye, and, by directly referring the elements of tissue to an examination by it, obtain the knowledge required without the intervention of the eye. But, on the contrary, the naked eye must be used constantly; for thus only *with* the microscope, and *not* by means of the latter alone, can we obtain the power of recognising minute pathological dif-

ferences. The more, therefore, we can do with the naked eye, the greater the proficiency in the case.

But to my illustration. Take, for example, the liver. In certain morbid states it is more opaque than in the normal, appreciably so to the unaided senses, which therefore recognise the appearances. The changes in such a case, though pertaining to the whole organ, are what are called *minute*, meaning thereby to distinguish it from a grossly palpable state of disease—as, for instance, an abscess, etc., etc. They may be amyloid, they may be fatty, they may be pigmentary, or the two latter at once. The unaided eye, or even the hand while cutting the organ with a knife, may, in some degrees of these changes, be sensible of the difference in form. The one recognises it as an *appearance*, the other as a sensation. But, if we wish to determine the exact degree and nature of these changes, which are those of the component elements, we must of course examine these separately; and this must be done with the microscope. The villi of the intestine may undergo similar changes, especially amyloid; and then they must be examined microscopically. But then the appearance in this case, though recognisable by the eye, is never of that palpable character that we are satisfied of it by the unaided eye alone; although the proficient in these examinations will be able, under good conditions, to distinguish the villus with the naked eye.

But, for the present, I must draw to a close. I write for the attention of medical men who can be inspired with an interest for pathology as well as "practice." None of the things I speak of here are novelties, nor are they longer considered as discoveries. The only thing in this quarter bearing that aspect is Dr. Recklinghauser's investigations last year into the nature and character of the lymph vessels (*Lymphgefasse*). Dr. Recklinghauser, now Professor, has ascertained some points which modify Virchow's views on the nature of the relations of these to the connective tissue. It is not needed that I should bear testimony to his remarkable qualities as an observer. I may hereafter give you some of the new points determined in absorption, and the nature of the tissues involved.

PATHOLOGICAL INSTITUTE, BERLIN, Feb. 24.

Correspondence.

VARIOLOUS ERUPTION LIMITED TO ONE SIDE.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—I have taken your valuable and instructive paper since its publication commenced, and the MEDICAL TIMES receives a hearty welcome every week. Occasionally the country doctor has anomalous cases of disease under his observation. The following case is to me a curiosity, and I will relate it:—A Mr. Brown, aged eighty years, residing in an adjoining town, some four weeks ago had an attack of varioloid. On his recovery he was attacked with pneumonia, and, a week ago, came here to remain with a daughter. I was called, as their family physician, to see him. His story is this, and it is corroborated by members of his family:

Thirty-six years ago he was vaccinated by a physician in his RIGHT ARM, the virus acting well, and he had the usual symptomatic fever, and still has the mark of the pustule; has been exposed to small-pox since, but did not contract the disease. Some nine days or a fortnight previous to his late attack of varioloid, two or three of his young children (by a second wife) were ill with small-pox; one of them slept with him five or six nights, lying on the LEFT side of him. His attack of the varioloid was quite severe, having many pustules; but all the pustules, without an exception, were confined to the LEFT side of the median line of his body. Pustules were numerous on the left side of his face, neck, and chest, and also on the left arm and leg. The skin on the entire right half of his body was, and still remains, in a normal condition.

Did the vaccination thirty-six years ago only affect or protect the right side? Would he have escaped had the child slept on the right side of him? Why should the eruption have been confined to the side on which he was not vaccinated? Is it essential to vaccinate in both arms, in order to be wholly protected from the contagion of small-pox?

Yours etc.

J. S. RAYMOND, M.D.

ALGONAC, MICHIGAN, April 4, 1864.

CHICAGO.

Special Correspondence.

THE winter of 1863-4 has in this city been marked by great vicissitudes of temperature, which have occasioned an unusual amount of sickness, that has been augmented also by the great influx of strangers, who, during the past year, have sought a home in this rapidly increasing metropolis. Add to this a consideration of the fact that more than one million hogs have this winter been slaughtered in the packing-houses which swarm along the banks of our river, and you have the triad of causes which have so considerably swelled the lists of mortality for the last season. Our geographical location on the western shore of Lake Michigan, with a broad sheet of water on the east and an equally level expanse of prairie on the west, without forests or hills to break the irresistible sweep of contending storms, exposes us continually to the most sudden and violent changes of weather. For example: the 30th of December was a lovely day—the last of those misty, dreamy days which form the Indian summer. At two o'clock the next morning, returning from the house of a patient, I could not but remark the beauty of the night. The air was soft and damp; no wind disturbed the light clouds which clustered around the moon; there was neither snow upon the ground nor ice upon the water, but twenty-four hours later the mercury had fallen twenty-eight degrees below zero, and a furious north-wester seemed to be driving over us all the storm-clouds of the Arctic zone. New-Year's Day was one of the coldest and stormiest days ever known in this part of the country. Hundreds of persons were frost-bitten, and quite a number were actually frozen to death. To say nothing of the direct effects of such severe cold, its remoter consequences were apparent in the great increase and aggravation of diseases depending upon congestion and inflammation of the internal organs of the body. I doubt if there is anywhere another city of equal population, in which the severity of winter occasions such universal suffering as is experienced by the inhabitants of Chicago. This is owing to the peculiar style of architecture so common here. At least nine-tenths of the dwelling-houses are built of wood, and many of them are low, one-story cottages. Owing to the scarcity of brick and stone, these wooden structures are seldom placed upon a solid foundation, but are reared upon a few wooden blocks or piles, which support the sills and the slender skeleton of the "balloon frame," to which thin clapboards are loosely tacked, without any approach to the tight "weather-boarding" and "under-pinning" that are considered so necessary in New England. Cellars are out of the question, the subsoil is so full of water. Consequently the winds of winter are kept from the interior of these habitations only by the layer of plaster which covers the lathing, and by the thin flooring upon the sleepers. There is no cellar filled with warm air under the house; no thick wall of confined air between the laths and the clapboards. Consequently when a cold north-wester, like that which ushered in the new year, sweeps across the prairie, it is not uncommon to see the mercury at zero in one's bedroom, and in the morning to find water frozen in kettles upon the stove which at bed-time contained a blazing fire. The snow huts of the Esquimaux must be more comfortable than these shingle palaces of Chicago. And when one reflects upon the number of delicate women and tender children who are thus

exposed, the prevalence of typhoid pneumonia, "spotted fever," diphtheritic sore throat, and all their allied forms of disease will not seem remarkable.

It is well known that our city has become the greatest slaughter-yard in the United States. The packing season commences about the 1st of November, and continues till the middle of January, or even later. The slaughter-houses are placed along the south branch of the Chicago river, and are nearly all in the south-western quarter of the city. Formerly all the filth and refuse of these establishments were conducted into the river, and now, though this practice is prohibited by the city authorities, much of the filth yet finds its way through the water of the river to the lake, poisoning its limpid flood with a foul current that extends for miles along the shore. When the wind blows from the south and west, not only is the whole town filled and everywhere pervaded by an astouishing variety of villainous smells, far more numerous and pungent than the famous "two-and-seventy" once discovered in the city of Cologne, but the currents of the lake are reversed, carrying the emptyings of the sewers and the filth of the river to the feeder of the water-works, so that the air we breathe and the water we drink is at such times thoroughly saturated with decomposing animal matter. What consequences more natural than the epidemics of erysipelas and variola, the frequent occurrence of puerperal diseases, and the zymotic tendency in everything which has marked this winter. An engineer has recently proposed, and is about to commence a work that, if successfully carried out, will furnish us with pure water; but pure air cannot so easily be procured till salt pork ceases to be a staple commodity. At present the supply of water is drawn from the lake by a pump, which is located on the shore within the city limits, precisely as if your Croton reservoir were filled from the East River (supposing that to be a fresh-water stream) by a forcing pump at Bellevue Hospital. Our engineer proposes to sink a shaft sixty feet deep near the shore, and thence to dig a tunnel two miles long under the bed of the lake. In this way he expects to reach a point beyond the polluted water, which usually flows in a regular current close along the beach. There the pure lake water will be admitted to the tunnel, through which it will find its way to the forcing-pump, and enter the reservoirs without contamination.

The two medical colleges have recently concluded their winter term, and have graduated an unusually large number of students. The Rush Medical College, which is the oldest and most noted of the rival schools, keeps on the even tenor of its way, and consequently attracts by far the largest classes. A diploma at the end of sixteen weeks of attendance upon lectures, which are addressed without modification to the early students and the advanced, is a bait which young aspirants of a certain class cannot resist. The faculty of the Chicago Medical College have, during the past year, erected a fine college building in the southern quarter of the town, very near the Mercy Hospital. The winter term continues twenty weeks, and is followed by a spring term of three months longer. The students have the advantage of daily clinical instruction in the wards of the Mercy Hospital, and the whole system of instruction proceeds upon the same basis as that which has proved so successful in the Bellevue Hospital Medical College. For more than twenty years Prof. N. S. Davis has earnestly advocated the adoption of a higher standard of medical education throughout the country, and it was with this object constantly in view that the course of study in the Chicago Medical College was arranged. If now the American Medical Association will throw off the fetters so long imposed upon its action by the rival bodies who only unite—like the petty tribes of ancient Greece—to oppose any higher authority which would control their relations to each other and to the public, we may hope for that much-needed improvement in the standing of the medical profession which has so long seemed almost Utopian. If we desire to be honored, we must become worthy of honor.

Much has been said about the inadequate rank, pay, and authority allowed to the medical staff in the army, but a little reflection will show that, excepting perhaps in the case of surgeons acting as medical directors of large armies, the surgeons and assistant-surgeons occupy as honorable a position as can be conceded, without granting them undue pre-eminence over their fellow-officers. So long as it must be admitted that the average ability of the classes which graduate from the medical schools of the country is inferior to the average talent of the graduating classes in the literary colleges, we are forced to the conviction that the young physician who, without previous collegiate training, becomes, after three years of medical study, an assistant surgeon in the army, with the rank and pay of a first lieutenant, has no right to complain while the choicest youth of the whole land, after spending four or five years under the severest educational discipline at West Point, are content to commence their military career with nothing better than the rank and pay of a brevet second lieutenant. Let us seek the best things, but first let us deserve all that we ask.

APRIL 4th, 1864.

Army Medical Intelligence.

ORDERS, CHANGES, &c.

Assistant-Surgeon Ely McClellan, U.S.A., has been granted permission to visit Washington, D.C.

The leave of absence granted Assistant-Surgeon Dallas Bache, U.S.A., from Headquarters, Department of the Cumberland, has been extended twenty days.

Surgeon J. L. Teed, U.S.V., is on twenty days' sick leave at Mendota, Ill.

Surgeon Frederick Lloyd, U.S.V., is on twenty days' sick leave at Peoria, Ill.

Surgeon J. M. McNulty, U.S.V., is on sick leave at New York city, rapidly recovering.

Surgeon S. D. Carpenter, U.S.V., is on twenty days' leave at Cedar Rapids, Iowa.

Leave of absence has been granted to Hospital Chaplain F. A. McNeill, U.S.A., for thirty days.

Surgeon J. C. Dorr, U.S.V., is on twenty days' leave at Medford, Mass.

Medical News.

ANNUAL MEETING OF THE KINGS COUNTY MEDICAL SOCIETY.—The forty-second annual meeting of the Kings County Medical Society was held, April 11th, at their rooms, in the Brooklyn Institute, Dr. D. C. Enos, President, in the chair. The minutes of the last quarterly meeting were read and approved. The annual report of the Treasurer was read and referred to the appropriate committee. A number of bills were presented and ordered to be paid.

On motion, the Society then went into an election for officers for the ensuing year. The officers were all elected by ballot, and separately, which occupied nearly two hours, and prevented the transaction of any other business. The election resulted in the choice of the following named gentlemen to fill the respective offices during the ensuing year:

President—Jos. C. Hutchinson, M.D.

Vice-President—E. R. Squibb, M.D.

Secretary—John S. Young, M.D.

Assistant-Secretary—Jos. P. Colgan, Jr., M.D.

Treasurer—Andrew Otterson, M.D.

Librarian—Geo. J. Bennet, M.D.

The Society numbers, at the present time, 153 members, and is in a very prosperous condition. It was organized March 2, 1822. The meetings are held as follows:

Monthly meetings—on the third Tuesday of every month.

Quarterly meetings—on the second Tuesday of July, October, and January.

Annual meetings—on the second Monday of April in each year.

Original Lectures.

LECTURES ON GUNSHOT INJURIES OF THE ABDOMEN.

By FRANK H. HAMILTON, M.D.,

PROF. OF MILITARY SURGERY AND FRACTURES AT BELLEVUE HOSP. MED. COLLEGE, AND LONG ISLAND COLLEGE HOSPITAL; SURGEON TO BELLEVUE HOSPITAL; LATE MEDICAL INSPECTOR, U.S.A.

LECTURE V.—PART III.

GENTLEMEN—In our study of gunshot injuries of the abdomen we shall find it convenient to adopt the same division of the subject as in similar injuries of the chest. I shall accordingly speak of them as superficial, perforating, and penetrating. A superficial wound or injury of the abdomen is one in which the parietes alone are implicated. A perforating wound is one in which the missile has traversed the cavity of the abdomen, having escaped from the opposite side by its own momentum, or having been removed from underneath the skin by the surgeon. A penetrating gunshot wound is one in which the missile, having fairly entered the abdominal parietes, has not retained sufficient force to pass through, and remains in the body.

First—Superficial Gunshot Injuries of the Abdomen.

In consequence of a severe blow upon the walls of the abdomen, inflicted by a solid shot, some portion of the muscular or tendinous parietes may suffer laceration; and this has happened sometimes when the integument was not broken. The injury to the muscle or to its tendon may be sufficient to cause an immediate hernial protrusion, under which circumstances the hernia, in most cases, becomes at once strangulated, causing great pain, accompanied with nausea and vomiting, and demanding prompt surgical interference.

In other cases, as a result of the contusion, the muscular tissue suffers a gradual atrophy, and the portions of tissue which remain undergo a degeneration, in consequence of which they become weakened, losing their power of contraction, and even of passive resistance, so that they finally give way to the pressure of the contained viscera. In this manner we see developed slowly in some cases what may be properly called large hernial protrusions, but in which it must be understood there is no absolute lesion of structure. We see the same atrophy, degeneration, and partial paralysis occasionally in other muscles of the body from similar causes, and especially have we had occasion to notice its occurrence after contusions of the deltoid muscle.

The immediate cause of this atrophy seems to be the inflammation produced by the injury, and to this may be added the long continued disuse of the muscle. Muscular fibre is rapidly developed by action, and becomes as rapidly atrophied when inactive. And it is certain that to desuetude, absolute and long continued, we must in many of these cases ascribe, in a great measure, the subsequent wasting and degeneration.

With a view to the prevention of such a result, the patient ought at first to be laid upon his bed and kept perfectly quiet, and such other measures should be taken as may be necessary to prevent or subdue inflammation; but as soon as the inflammation is fairly overcome, a broad and well adjusted bandage should be placed around the abdomen, and the patient should be allowed to take such moderate exercise as may be best calculated to bring these muscles gently into action. Frictions daily employed, and even blisters, may prove serviceable.

If, however, the muscular paralysis continues, nothing can be done but to support the weakened walls of the abdomen by a broad and well padded bandage, or by properly constructed trusses.

I have met with one example of ventral hernia from atrophy and degeneration of the muscular parietes in civil

practice, in the person of a woman aged 30, who was admitted into the Buffalo Hospital on the 17th Oct., 1850, suffering with cancer of the womb. This woman had given birth to two children, but the last of them was born four years before the hernia commenced. The cancer had been progressing about one year; there was no such enlargement, however, as to cause any increased pressure upon the walls of the abdomen. A few months before her admission she fell against the corner of a table, striking upon the front of her abdomen. Some slight tenderness followed, and soon the protrusion commenced. When admitted, the whole of the muscular portions of the two recti abdominis seemed to be completely absorbed, so that when she made an effort to contract the muscles of the abdomen, a hernial protrusion occurred of the exact length and breadth of the recti muscles, extending from the ensiform cartilage to the pubes. This had taken place gradually and within a period of four months.

Occasionally round balls have been found to penetrate beneath the integuments of the abdomen, and, being turned aside by the aponeurotic expansions or the muscular fibres, they have made a considerable circuit. I have not seen this happen to any considerable extent with the conical ball, and it is probable that it seldom occurs. Indeed it would be an error to suppose that even the round ball is very often thus deflected. In general it may be assumed that the direction taken by the missile corresponds to a nearly straight line drawn between the points of entrance and exit. If the missile has not passed entirely through, the probability of such a deviation is much greater than when the perforation is complete.

I have recently seen a case in which a pistol ball, fired at a very short range but a little obliquely, was deflected by the muscular aponeurosis of the front of the abdomen, and passed along four or five inches immediately under the skin, until it was again deflected inwards in a manner which was not easily explained, burying itself deep in the pelvic cavity.

In some of these cases, and especially when the course of the ball is entirely subcutaneous, its track is indicated by a slight discoloration, like that which marks the course of inflamed and superficial absorbents. Usually this discoloration is not present until after the lapse of a day or two, and then it may be attended with a moderate degree of induration and swelling, so that it feels like a cord, and is tender upon pressure.

There is present, also, in a few cases of long subcutaneous wounds made by conical balls, canister, and other large shot, a sensation of crepitus under the finger, like the rustling of leaves, and which, if present immediately after the occurrence of the accident, as I have sometimes found it to be, must be due to the admission of air which has followed the track of the missile. At a later period a similar sensation may be occasioned by the presence of lymph among the broken and disorganized tissues.

In all these superficial injuries, that portion of the peritoneum which lines the walls of the abdomen is liable to become inflamed, partly from the direct injury which it has sustained by the concussion, and partly from an extension of that irritation which is primarily developed in the track of the wound. Flesh wounds of the back are much less liable to give rise to peritonitis, owing to the greater thickness of the muscles in this region, and to the absence of the reflected peritoneum along those portions of the loins upon which the abdominal viscera have their principal attachments.

I saw at Frederick City, Md., under the care of Surgeon Lewis, U.S.V., a soldier belonging to the 2d U.S. sharpshooters, who was wounded at Antietam, on the 17th of September, 1862, by a conical ball which entered just above the right ilium, a little to the outside of the right sacro-iliac junction, and, having passed across the muscles of the back, had emerged upon the left side, from which position it was removed by Surgeon Lewis on the 23d day. Neither the vertebrae nor any of their processes seemed to

be injured, and it is probable that the ball passed between two adjacent spinous processes. I have before remarked that balls which, deflected by subcutaneous structures, make the circuit of the body, are usually arrested or thrown to the surface when they reach the spinous processes; in this example it will be noticed that the course of the ball was direct, and it does not therefore constitute an exception to my remark; but in alluding to this case my particular object was to mention that no symptoms ensued which would indicate that inflammation had reached the peritoneum.

The effects of the concussion often reach far beyond the parts upon which the missile immediately touches, even when the walls themselves suffer no apparent lesion. A large shot, whose momentum is nearly expended, may cause instant death as it falls, or obliquely impinges upon, or rolls over the surface of the belly. I have already mentioned, in my general remarks, an example of this kind which came under my observation. In such cases death is the result of the shock, and it is not necessarily accompanied with any lesion of the viscera.

In other cases the viscera are ruptured, and especially is it not uncommon to find a rupture of the liver or spleen; occasionally the kidneys are torn; and still more rarely the stomach, bladder, and other hollow viscera.

In case neither the wound nor the shock extends beyond the muscular parietes, the constitutional symptoms are usually very mild. If the patient, under these circumstances, looks pale and becomes faint, or is affected with nausea, these phenomena must be in most cases ascribed to alarm rather than to the injury itself. It is true, however, that these symptoms are more or less present in a great majority of cases; and since the anterior and lateral muscular walls are in such close connexion with the peritoneum, it is not improbable that this delicate and highly vitalized membrane feels the shock, and reflects its injuries upon the great nervous centres, in many instances of really superficial and slight wounds.

On the 11th of July, 1854, a lad 16 years old was shot accidentally by his comrade, while out shooting pigeons. The weapon used was a musket loaded with small shot, and the distance was about thirty paces. About one dozen shot entered various parts of his body, only one of which took effect upon the abdomen. This one entered four inches above the anterior superior spinous process of the right ilium, causing a severe pain in that region, accompanied with faintness, and being followed by a diffused tenderness, but no strongly marked signs of peritonitis. I was unable to find any of the shots. In a few weeks he was entirely well.

I have known complete but temporary paralysis of the bladder occasioned by the mere concussion of small shot, as in the following example:—

Wm. Graham, a private in the 12th N.Y. Inf., at the battle of Blackburn's Ford, on the 18th of July, 1861, received a charge of buckshot just above the pubes, upon the abdomen. I saw this man on the same day, and also on the third day following the injury. Surgeon Palmer (Prof. Palmer, of Ann Arbor, Mich.) extracted all of the shot very soon after the wound was received, none of them having penetrated deeply; but he was found to have paralysis of the bladder. On introducing the catheter the urine was observed not to be bloody. There was no evidence, therefore, that the bladder had suffered any lesion. There was no paralysis in any other portion of his body. The bladder resumed its functions completely after a few days.

It is probable in this case that the paralysis of the bladder was due alone to the shock or concussion upon the parietes of the abdomen.

The signs which indicate a rupture of the internal viscera can scarcely be mistaken for those which sometimes accompany these slighter injuries. When the liver or spleen has suffered lesion the patient in most cases dies speedily from internal hæmorrhage, rarely surviving

twenty-four hours; in other cases the hæmorrhage is more gradual; but in all such examples there are added to the usual signs of nervous shock the signs of progressive and excessive exhaustion consequent upon the bleeding.

Only a few days ago a man was brought into the wards of the Long Island College Hospital whose body had been traversed by a carriage wheel, the accident having occurred about twenty minutes before his reception. The symptoms plainly indicated a rapid internal hæmorrhage. He was pale and bathed in a copious, clammy perspiration. No pulse could be felt at the wrist, and his abdomen was already very tumid. He died in an hour and a half from the time of the receipt of the injury. On examination after death we found an extensive laceration on the convex surface of the liver, commencing about two inches below the right lateral ligament, and extending upwards and inwards to the posterior extremity of the spigelian lobe. No other viscera or vessels had suffered laceration. The cavity of the abdomen was completely filled with dark venous blood.

On the 1st of July, 1860, a boy 18 years old was admitted into this same hospital who had just been struck by a whistle-tree on the right side. He was pale and exhausted. His pulse was small, soft, and slow, and he was continually retching and vomiting. On the following morning we found his belly swollen and tender, and he was unable to evacuate his bladder. The symptoms led to a suspicion of a rupture of the liver, but as the prostration was not greatly increased, and as peritonitis was developed in some degree, the suspicion was not fully confirmed. His urine was withdrawn by a catheter, and warm fomentations were applied to the belly, while opium was administered internally.

His death occurred at the end of about forty-eight hours from the time of the receipt of the injury, and the autopsy disclosed the fact that the margin of the liver on the right side was torn vertically to the extent of four inches, and the cavity of the peritoneum was filled with dark-colored blood; there were also some recent deposits of lymph upon the surface of the peritoneum.

In regard to the local treatment of superficial gunshot wounds of the abdomen very little needs to be said. If we can be certain that the missile has not penetrated the cavity, it will be better to leave them open, only covering the orifice of the wound with a simple ointment spread upon lint or a piece of cloth. Water, when employed in these cases, as in all other injuries of the abdomen, should be tepid or warm. Abundant experience has shown that peritoneal and intestinal inflammations cannot be treated so successfully by cold external applications as by warm. Indeed, when we allow ourselves to be governed by that rule which we have already laid down in our general remarks on the treatment of gunshot injuries, namely, that we should employ that temperature which is most agreeable to the patient, we shall not resort to anything but warm fomentations in the cases now under consideration. Invariably, so far as my experience extends, patients have declared themselves comforted by warm fomentations, and annoyed, chilled, or distressed by the cold.

Absolute rest should be enjoined in the recumbent posture, and, as far as possible, the posture should be that which will most completely relax the abdominal muscles and favor the coaptation of the wounded surfaces.

Cathartics are generally forbidden, but it is desirable that the bowels should move occasionally, if it can be accomplished without much disturbance of the patient and without the agency of active medicines. The diet must be low. If peritonitis is threatened, opium, the lancet, and leeches may be demanded.

Another result of these superficial gunshot injuries may be the formation of an abscess between some of the various tissues composing the abdominal walls. Most commonly these abscesses form outside of the muscular and tendinous expansions, and in such cases they are attended with but little danger. But whenever matter is deposited more

deeply it finds its way with difficulty to the surface, and it may after a time open into the cavity of the peritoneum, or, what is more likely to happen, it may fall down towards the pelves, and then disperse itself in the loose cellular tissue of the pelvic cavity. Either of these events is very apt to prove fatal, and ought to be prevented, if possible, by an early diagnosis and a timely operation. It is sometimes exceedingly difficult to determine the existence of matter at this point, owing to the little resistance given by the subjacent parts, but in a case of doubt the surgeon may generally complete his diagnosis by the use of the exploring needle. If pus is found, no time should be lost in giving it a free exit. At the same time the surgeon must be warned not to make any unnecessary incisions of the muscular or tendinous coverings of the abdomen, especially where the walls are naturally thin, as upon the sides and front, since such incisions are almost inevitably followed by hernial protrusions after the wound has cicatrized.

Original Communications.

CEREBRO-SPINAL MENINGITIS, WITH AUTOPSIES.

By WM. FROTHINGHAM, M.D.,

OF WASHINGTON HEIGHTS; LATE HOUSE PHYSICIAN AND HOUSE
SURGEON TO BELLEVUE HOSPITAL.

DURING the winter of 1861 and '62, while connected with the Army of the Potomac, as Surgeon of the 44th N. Y. S. Vols., I saw a brief epidemic or endemic of this disease. My notes, taken at the time, may prove of some interest.

Four of the following cases occurred in the regiment while lying at Hall's Hill, Va., near Washington; the other two were in adjoining regiments. The camp was situated on the foot of a hill, gently sloping towards the west, and extending down into a hollow, with a swell of ground in front, used as a parade; the sub-soil was clay; weather mild and damp.

The soldiers occupied quarters about seven feet square, built two or three feet high of logs plastered with mud, and surmounted by a wedge tent. Each held five or six men; and since, notwithstanding the efforts of the medical officers, ventilation at night was neglected, the men slept in a very bad atmosphere. Some two hundred of them had suffered with measles during the winter. Remittent, intermittent, and typhoid fevers were prevailing. The following cases, however, were not located in the worst portion of the camp, nor least ventilated tents, and were all young, robust men.

CASE I.—A young man, aged 19, of good habits and vigorous health, complained in the night of severe pain in the head, and was at daylight found groaning, with his hands pressed upon his abdomen as if suffering from colic. I saw him immediately; found him groaning, though insensible; paralysed in one arm and leg; occasionally convulsed in every part except the face; pupils equally and moderately dilated, and insensible to light; conjunctivæ of a dull-red hue; face darkly flushed; tongue and teeth coated with sordes; pulse frequent and feeble; breathing stertorous. I ordered croton oil internally, blisters to temples and nucha. He continued in the same state, and died in the afternoon. Circumstances prevented an autopsy.

CASE II.—A young man, age not noted, was attacked one morning with a chill, followed by fever and severe headache. In the afternoon I first saw him, when he told me that he was much better. The disease seeming ordinary malarious fever, I took no particular notice of the case, but ordered quin. sulph. grs. v. which he immediately vomited, but a second dose was given and retained. Next morning I found him in a convulsion. His tent-mates said he had rested quietly all night, but aroused

them in the morning by his convulsive movements. Pulse quick and feeble; respiration rapid, but free throughout the lungs; heart sounds feeble but distinct; eyes suffused and dull; pupils moderately dilated and insensible to light; face pale when free from convulsions, which were frequent and violent, producing opisthotonos; the great toes were drawn inward, the thumbs not. He had, before I saw him, a free involuntary evacuation; was now insensible, and could not be made to swallow anything. He was seen in consultation by Dr. G. H. Lyman. Mustard was applied the whole length of the spine, and chloroform given to quiet the convulsions. He died at noon.

Autopsy, twenty hours after death—Rig. mortis moderate; surface natural. On removing the calvarium, I found the dura mater a little more congested than usual. Beneath the arachnoid was a thin layer of exudation, most abundant along the course of the vessels. The anterior lobes of the cerebrum and the cerebellum presented but little of this appearance, but over the posterior lobes of the cerebrum it was abundant, and also at the base of the brain and on the medulla oblongata. Spinal cord not examined. The serous surface of the pericardium was highly congested, though perfectly smooth, and contained three or four ounces of turbid serum. All the other organs appeared healthy; the kidneys of normal size and appearance; although, having no microscope, I could make no minute examination.

CASE III.—A large, robust man, aged 25, complained of pain in the head and chill, and exhibited some fever. The next day found his headache intense, and the symptoms generally worse. Pressure on the back of head and neck aggravated the pain in those parts. Pulse rapid and feeble. I ordered cups to be freely applied to both head and neck, followed by active counter-irritants. Towards night he became somewhat dull, and complained of the endless processions that passed before his closed eyes, and seemed much disturbed by them. After consultation with Brig. Surg. Bentley, calomel was given to the amount of sixty grains, but no evacuations were produced. Meanwhile the patient could be aroused by addressing him in a loud voice. He often complained of the increasing pain in his head, and referred to the possibility of his death.

Several hours after taking the amount of calomel mentioned, he vomited freely a green liquid. At a late hour in the night he could with difficulty be aroused, but knew his captain and one or two men when they addressed him.

By morning he was entirely insensible, and lay, during the day, comatose and breathing stertorously. In the afternoon he suddenly sank, and died that evening, after an illness of three days. No autopsy was allowed. He alone, of the five fatal cases, was free from convulsions. Two similar cases occurred in adjoining regiments. At the autopsy of one I was present. He had been bled freely at the arm, but died after three or four days' illness. The brain presented appearances similar to those last described, but the effusion was of a greenish yellow color, and not so diffused. The spinal cord, in this instance examined, was abundantly coated with greenish semi-diffused exudation. Having no microscope, I sent it to my friend Dr. H. B. Sands of this city, who found it plastic exudation, free from pus cells.

About this same time, a private of my regiment exhibited what I considered to be all the symptoms of this disease. Chills; rapid but feeble pulse; excruciating headache and pain in back of neck; furred tongue; constipation; dull and injected eyes. I ordered a free application of cups to the temples and neck, which somewhat relieved him. The application was renewed four or five times during the day, and the unpleasant symptoms gradually disappeared, leaving great debility, from which he recovered. I twice saw, by permission, another case, which, under the free application of cups to the length of spine, improved; but, under large doses of calomel, the patient sank in less than a week.

The above report is defective in many points which might assist in determining the cause of the disease. Here

was a large army living under almost exactly the same circumstances as to food, beds, ventilation, clothing, etc., and within a few miles of space; yet a few cases (enough to indicate some common cause) of an unusual disease occurred in one brigade (as I did not hear of any other cases I take for granted there were none). Malarious and continued fevers prevailed in all the camps throughout the army. The only circumstance influencing disease in which this brigade differed from others was in the severity of its labors. Under Gen. Daniel Butterfield, a stern disciplinarian, who always, sick or well, did his own entire duty and would receive no less from his subordinates, the men were drilled to the full extent of their powers—often to exhaustion. I did not at the time recognise this as a cause of the disease in question, but I learn that in the present epidemic in Pennsylvania, the attack generally follows unusual exertion and exposure to cold.

Treatment, to be of value, must be early, and, when other fevers are prevailing, an early diagnosis is not easily made. A single chill, followed by fever, with a quick, not bounding pulse, soon growing feeble, severe headache and pain in back of neck, aggravated by pressure on spine, suffused eyes, and darkly flushed face, would indicate it to one already awake to the disease. There were no petechiæ to constitute spotted-fever.

Repeated cupping to temples and spine seemed the most efficacious treatment. I have not heard Dr. Draper's report to the Academy of Medicine, and know not in what other points besides absence of eruption these cases differ from the present epidemic.

158TH STREET, April 15th, 1864.

TWO CASES OF FRACTURE OF THE FEMUR THROUGH THE CONDYLES.

By J. W. SOUTHWORTH, JR., M.D.

HOUSE SURGEON, BELLEVUE HOSPITAL.

ELIZA WILSON, æt. 45, admitted into Bellevue Hospital Feb. 16, 1864. She said she fell down stairs on the evening of the 15th, and that after the accident she walked into her room; at all events got there without any assistance. On her admission her knee was enormously swollen, so much so that the fracture could not then be recognised. I received the case as one of severe contusion. When the swelling had in some degree subsided, it was found that the femur had been fractured just above the condyles; the size of the tumor prevented any other injuries from being discovered. Extension was applied in the usual way. After the swelling disappeared, the shape of the injured knee was normal, and the bones were supposed to be in apposition. The case progressed favorably till the eighteenth day from the receipt of the injury, when she had chills, loss of appetite, a dry tongue, etc.; she also lost control over her bladder. On the twentieth day she became delirious; on the twenty-first the eruption of typhus fever appeared, and she was transferred to the fever ward. She died on the twenty-fourth day after the accident.

The autopsy revealed the following fractures of the femur:—The shaft was fractured obliquely downwards and forwards, from four and a half inches above, down to the condyles, and the upper fragment rode down, so that the lower portion overlapped the patella for half an inch; the lower fragment was fractured through the inter-condyloid notch into the knee-joint; the outer condyle was fractured downwards and forwards, so that it was divided into two nearly equal parts. The condyles were somewhat displaced upon themselves, as were also the fragments of the outer condyle. Callus had been thrown out, and both the fractures about the condyles and that of the shaft were so firmly united, that it was only by the exercise of considerable force that they could be moved upon each other.

Perhaps the most noticeable feature in this case is the celerity with which the fractures took on the reparative

process. We know that a bone unites much more quickly at its articular extremities than in its shaft, but it appears that union took place in this case in an unusually short time. The patient died on the twenty-fourth day after the receipt of the injury; during six of these days she was under the influence of typhus poisoning, when it is supposable the process of reparation was almost if not entirely suspended. In the eighteen remaining days such firm union had taken place, that it was with the greatest difficulty that motion could be detected either in the fragments of the shaft or the condyles.

Considering the absolute rarity of fracture through the condyles, it is somewhat singular that another example of it should follow so closely upon the one just described. The following case occurred in the service of Dr. Stephen Smith, under the care of Dr. Brownell, the latter gentleman having had the kindness to furnish me the notes. The patient in this instance was a stout Irishman, who fell from a height of thirty feet and sustained three fractures, among which was one of the base of the skull; he survived five days. The fracture of the thigh was evidently from direct violence. The post-mortem examination disclosed the following fractures:—The two condyles separated from each other through the intercondyloid notch, and both broken from the shaft of the femur, about an inch above the insertion of the gastrocnemius muscle. The transverse fracture is very irregular, some portions of it extending down through the epiphysis, leaving small fragments of the condyles loose. The inner condyle was also fractured vertically through the middle, and the external condyle had a fragment of considerable size broken from its inner side. There was very little displacement, and about an inch shortening. The fracture was readily enough diagnosed, but no attempt at extension was made, as the patient was in a semi-comatose condition from the effect of the cranial fracture.

BELLEVUE HOSPITAL, March 30, 1864.

FRACTURE OF THREE CERVICAL VERTEBRÆ,

WITH COMPOUND FRACTURE OF THE FEMUR.

REPORTED BY FRANK H. HAMILTON, JR., M.D.

A. A. SURG. U.S.A., SURG. IN CHARGE M'DOUGALL BARRACKS,
FORT SCHUYLER.

On the night of the 12th of March, 1864, James Featherstone, private 20th N. Y. Ind. Battery, in attempting to descend by a flight of stone steps from one of the walls of Fort Schuyler, mistook his direction, and, stepping off at one corner, fell some twenty feet to the ground. During his descent the right and posterior part of his neck encountered some scantling which stood in the angle of the walls. Still further he came in contact with a wheelbarrow, his right thigh being thrown violently across, and breaking off six inches of the stout hickory handle. He was immediately picked up by some comrades, and carried to the Post Hospital. Dr. Pease, the post surgeon, being absent, a messenger was dispatched for me. I found him lying extended upon a stretcher, neck fully extended in a straight line and rigid, perfectly conscious, and aware of the danger he was in. Pulse normal; respiration slow but easy; articulation difficult; deglutition labored; face and neck swollen, and rather livid; a patch of ecchymosis, the size of one's hand, on the right and posterior part of the neck; complained of some pain over this spot; no pain elsewhere; total paralysis of upper and lower extremities; complete anæsthesia below a point corresponding with the upper margin of the third rib; crepitus plainly to be distinguished at points corresponding to the third and sixth cervical vertebræ. I had, of course, no difficulty in declaring this to be a case of fracture, with perhaps a dislocation of one or more cervical vertebræ. Knowing that interference would be worse than useless, I merely gave directions that the patient should be kept perfectly quiet; ordered an anodyne, and left him. He passed a sleepless night. In the morning one of the nurses observed there

was blood oozing through one leg of his trowsers. Upon uncovering the parts it was discovered that he had sustained a compound fracture of the femur in its middle third, the lower end of the upper fragment having been pushed through and severely lacerating the tissues, and yet so completely was sensation abolished, that the patient had not the slightest knowledge of it, though perfectly conscious. He survived the accident forty hours. During the last twelve hours I found it necessary twice to introduce the catheter and relieve his bladder, there being total paralysis of this organ. His bowels also became very much swollen and tympanitic. The autopsy, six hours after death, disclosed the following facts:—A fracture of the spinous process of the second and third cervical vertebrae; a longitudinal fracture through the body of the sixth cervical, the fragments being tilted in and pressing upon the cord. The fracture of the femur was found to be near the middle, and transverse. The direction of the fracture, so unusual in this bone, was probably due to the fact that the force was received at right angles to the axis of the shaft.

FORT SCHUYLER, April 8th, 1864.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, Dec. 9, 1863.

DR. D. S. CONANT, PRESIDENT, IN THE CHAIR.

ULCERATION OF GALL-BLADDER—PERITONITIS.

DR. FLINT presented the gall-bladder and portion of the large intestine removed from a man 32 years of age, who was admitted into Bellevue Hospital, Nov. 27th, with acute peritonitis. He was at work on the 25th, when he was suddenly seized with a severe pain in the upper part of the abdomen, and shortly after took to his bed. When admitted to the hospital he presented the usual symptoms of the affection; the pulse was 120; tenderness on pressure over the abdomen; respiration thoracic; upper lip elevated, etc. He was placed immediately under the opium treatment, and the case progressed very finely, when at the end of the fourth day he was attacked with dysentery, and died on the seventh instant. He was recovering from his peritonitis at the time he was attacked with the dysentery.

On opening the abdomen the intestines were found everywhere agglutinated together. The amount of lymph effused over the intestines was comparatively small, but in the situation of the lower margin of the liver it was more abundant, and was tinged with a deep yellow color. This coloration was found to be due to the escape of the bile through a perforation in the gall-bladder. This viscus contained a considerable quantity of bile, but no gall-stones. There were two ulcerations; the largest about the size of a dime, and each surrounded by infiltrated tissue. There was no assigned cause for the occurrence of the ulcerations.

DR. LEWIS SMITH presented some calculi from a beef's kidney, and also presented the monster exhibited at the close of the meeting before, and gave a minute description of the anomalous appearances.

MEDULLARY CANCER OF BREAST.

DR. LITTLE presented a specimen of medullary cancer of breast, and gave the following history:—Mrs. Nelson, æt. 43. About nine years ago patient noticed a small flat lump on the right breast. This gradually enlarged, but caused no uneasiness or pain. Six months ago I saw her for the first time. The tumor was situated on the outer side of the right breast, and was about the size of my fist. It had a hard, lobulated feel, freely movable upon the parts beneath. A small portion of a soft and semi-fluctuating character, about the size of a pigeon's egg, projected from the surface of the tumor. The skin covering this portion was thin and tense, with a large number of small blood-

vessels ramifying over its surface. There was no retraction of the nipple, and in no place, except over the protruding portion, was the skin at all adherent. About five weeks ago she again presented herself to me. Ulceration over the most prominent portion of the tumor had taken place, and a fungous protrusion had commenced. The case was examined by Dr. Parker, and he advised its removal, to which she consented; and on October 30, assisted by Dr. Markoe, I removed the breast in the usual manner. The hæmorrhage was somewhat greater than usual during the operation. The wound healed kindly, and in ten days after the operation the patient was able to go about the house.

On examining the breast after removal I found that the tumor was easily separated from the surrounding fat and glandular structure, with which it was closely connected but not incorporated with them. The mammary gland seemed to be perfectly healthy. The tumor was lobular, the lobes being covered with thin transparent capsules; some of them filled with fluid, but most of them contained a medullary substance. Some of the lobes had scattered through their contents masses of a yellowish-looking substance resembling tuberculous matter.

On making a microscopic examination I found the usual appearance of medullary cancer—abundant oval nuclei having bright nucleoli. Dr. W. H. Draper also examined the specimen. The yellow masses which were scattered through the tumor were composed of granular matter, oil globules, and crystals of cholesterine; and, according to Paget, are the result of a fatty degeneration of the cancerous matter.

DR. POST remarked that it was very common for soft cancer of the breast to be unconnected with the organ, while the scirrhus variety usually developed in its substance.

DR. SANDS did not think that the disease had been medullary in its character for nine years, but that it had most probably been scirrhus originally. Or it might have been simply a benign tumor, a tumor at first which afterwards took on a malignant disease. Such instances are not very unfrequent, and offer a strong argument in favor of removing such growths.

STATED MEETING, Dec. 23, 1863.

DR. D. S. CONANT, PRESIDENT, IN THE CHAIR.

SWALLOWING OF GOLD PLATE, WITH TEETH ATTACHED.

DR. VOSS presented a gold plate, with teeth attached, which had been swallowed by a woman, during sleep, having remained in her throat for three and a half months. The patient was forty-seven years old, and stated that during a night of last summer the accident occurred. She awoke with symptoms of asphyxia and vomiting, but the foreign body could not be dislodged. She found that her voice had gone. Several physicians saw her, and, as the result of several examinations of the throat, had come to the conclusion that the lady had been mistaken as to the cause of her difficulty. Before Dr. Voss saw her the patient consulted Dr. Simrock, and demonstrated to him the presence of the foreign body in her throat, by introducing the probang herself, with the head bent downwards, the body being in a stooping posture. She succeeded by this manoeuvre in striking metal. Dr. Simrock then brought the patient to Dr. Voss, who, by the same means, was likewise convinced of the presence of some foreign body which had lodged itself in the neighborhood of the larynx. Dr. Simrock made a laryngoscopic examination, but could see nothing save a paralysis of the left side of the glottis. The patient was subsequently anesthetized, and the foreign body was withdrawn from the fossa navicularis by means of a small curved and blunt-pointed lithotomy forceps. When she awoke she felt immediately relieved. She regained her voice and ease of deglutition, and three weeks subsequently the laryngoscope discovered that the right side of the glottis had returned to its normal

condition. It seemed at first remarkable that the probang should pass readily into the stomach without encountering the least obstacle, but this was explained by the fact that the plate, which was a very small one, was tucked away in such a manner that the convexity of the body fitted into the concavity of the fossa.

DR. CONANT referred to a case presented by Dr. Clark, about three years before, where a man had swallowed a set of false teeth which lodged in the œsophagus, and ulcerated through into the pericardium, causing death by pericarditis.

DR. GARRISH cited the case of a boy twelve years of age who, while playing ball with a button in his mouth, suddenly swallowed it. The foreign body remained in the larynx for a period of ten months, when Dr. Garrish removed it by opening the thyro-hyoidean membrane. He believed that this practice was preferable to the persistent search for suspected foreign bodies.

DR. ELIOT, in this connexion, referred to the case of Mr. Bunnell.

CANCER OF PENIS IN A DOG.

DR. JACOBI presented a specimen of cancer of the penis occurring in a dog. The disease was confined to the tissues outside the urethra. On microscopical examination the mass was found composed entirely of cells, which are characteristic of the soft variety of cancer. The operation was performed by Mr. Hart, a student of the N.Y. Medical College. In conclusion, Dr. Jacobi remarked that cancer in the lower animals was exceedingly rare; he recollected but one other case where it had been met with, and that was in the bladder of a rat, as discovered by Dr. Simroek.

INGROWING TOE NAIL.

DR. CONANT presented a specimen of ingrowing toe nail, and, after rehearsing the different modes of operation resorted to for its cure, such as wedges of cotton, cord, and adhesive plaster, crowded under the edge of the nail, removal of the nail entire, etc., described the method most in favor with himself, which is this:—The outer and inner margins of the nail are removed entire, leaving the central third as a protection. He is careful not only to remove the entire matrix of those portions of the nail, but the surrounding indurated tissue as well. The denuded surface in time becomes covered with a horny, protecting substance, like thin nail, and the patient suffers no more from the annoying difficulty. He stated that patients who suffered long from ingrowing toe nail were in the habit of walking with a peculiar gait, bearing most of the weight upon the heel, in order to remove as much as possible all the pressure upon the toe. He instanced an example of this in a young lady, who, after the operation had been performed, took a long while to free herself from this awkward gait. In this connexion, also, as exemplifying the shock which the general system suffers from extraction of the entire nail, he referred to the case of a death in a strong man while actually under the influence of an anæsthetic. The accident occurred at the Marine Hospital, Chelsea, Mass., while he was resident surgeon. No other cause of death could be found, save as the result of the simple shock of the operation.

DR. GARRISH stated that he was in the habit of removing the difficulty of ingrowing toe nails, by splitting the nail through the centre, and removing each half while the patient was under the influence of chloroform.

DR. VOSS is in the habit of removing only the offending margin, and dressing it afterwards with lint.

DR. ELIOT adopts palliative means, such as elevating the margin with cotton and cauterizing the exuberant granulations. He has never met with a case sufficiently severe to justify the employment of other means.

PRIZE ESSAY ON ANÆSTHETICS.—The Mississippi Valley Association offers a gold medal of the value of one hundred dollars for the best essay on anæsthetics and their use. It is open to the world for competition.

VISIT TO THE HOSPITALS ON THE FIELD OF CHANCELLORSVILLE, VA.*

By C. K. IRWIN, M.D.,

SURG.-IN-CHIEF, EXCELSIOR BRIGADE.

On Sunday, May 10, 1863, having received orders from the medical director, I proceeded with others to the "United States Ford," where we were permitted by the enemy to cross the Rappahannock in order to render assistance to our wounded who fell into their hands during the battle. Eight wagon-loads of stores, consisting of blankets, dressings, medicines, beef stock, coffee, condensed milk, stimulants, farina, etc., were ferried over in pontoon boats, reloaded in wagons furnished by the enemy, and the form of parole complied with. I was then placed in charge by Surgeon Asch, U.S.A., and permitted to proceed towards Wilderness Church, some seven miles distant from the ford, and in the vicinity of where the 11th corps were so seriously repulsed only a week or ten days previously. Late at night we reached our destination, some two miles to the west of the Chancellorsville House. To this point many hundreds of wounded men had been carried, and it proved to be one of the largest and most central of the many hospitals established, and was under the charge of Surgeon Hewett, 119th N. Y. Vol., 11th Corps. Early next morning, having distributed coffee, milk, beef stock, stimulants, dressings, etc., for the want of which much misery had been endured, and being relieved by the medical director of the 11th corps of the charge of these stores, I proceeded to inquire regarding the hospitals containing the men of our division. Wilderness Church was occupied principally by the enemy's wounded. Our own had been carried to the various plantations, east and west of this point, over an area of at least two miles. On visiting the hospitals to the west of the church, it was ascertained that most of the wounded of our division on this section of the field were at the hospital first mentioned. After rendering such assistance as lay in my power to those in the others, I returned to the one in charge of Surgeon Hewett. This large house, situated to the south of the plank road, near Wilderness Church, was surrounded with small buildings, such as are usually arrayed on southern plantations, comprising negro huts, stables, sheds, pigsties, hen-roosts, etc. The rooms, halls, and veranda of the main building were filled with wounded, lying on the floors without straw, the larger proportion without blankets and in the clothing in which they had fallen, now saturated with blood, urine, and, in many cases, more offensive matter. The wounds were putrefied, and some contained maggots. The wounds were generally much more severe than are usually met with in field hospitals, for those who had slight wounds had run from the field. Every place of shelter from the storms, whether hut, hen-house, pigsty, or shed, which could be obtained, was filled to the utmost capacity; and yet hundreds lay on the ground in the open air, with only pieces of shelter-tents or blankets raised over them. Some ten or twelve surgeons and assistant-surgeons of the 11th corps had been captured during the battle, and though distributed over a space of four miles or more, with several thousands of wounded, did probably all in their power for the relief of the sufferers, receiving little or no aid from the surgeons of the enemy, who were busy attending to their own wounded. The rebel surgeons, having a poor supply of surgical materials, appropriated nearly all the dressings, chloroform, instruments, hospital knapsacks, etc., which our surgeons had saved. The horses having been confiscated, all our medical officers were dismounted except the director of the 11th corps. One surgeon lost 400 dollars, which he had placed in his holsters for safety during the battle, thinking if he was killed the horse might run to our lines, be recognised, and the money saved for his family. The enemy got both horse and money. The rebel surgeons had, in some in-

* Read before the Medical Society, 2d Div. 3d Corps.

stances, assisted our own in operations, and then coolly appropriated the surgical instruments to their own use as contraband of war, with the observation, that the owner could apply to the Medical Director of General Lee's army for redress. The only food furnished was flour and old bacon, excepting a quantity of hard or pilot bread, which was sent the day previous to our arrival. No tea, coffee, fresh meat, milk, or stimulus, in fact, nothing which is considered by us as requisite for a weak, wounded man. No bandages or dressings, but few hospital attendants or stewards, and these principally improvised from the men with slight wounds, or others who knew but little or nothing of the principles of nursing the wounded. Through inefficiency there was but little order or systematic management, such as we usually have at the hospitals on the field.

Assistant-Surgeon Asch, U.S.A., Surgeon Hewett, one or two others, and myself formed an operating staff, and in turn made a number of amputations on those who were found in a state which warranted the undertaking. A number of patients were brought to the table who, on careful examination, were found so low, and gangrene had progressed so far, that the most we could do was to return them, with no other prospect than speedy relief by death. Gangrene in its various stages, and secondary hæmorrhage, were prevalent to an unusual extent. Throughout our campaigns I have not witnessed so much gangrene as was here presented. On many patients the time for operating had passed. A majority of the cases requiring amputation had been deferred by the surgeons on account of the deficiency of almost everything necessary for success, in the hope, from day to day, that proper supplies would arrive either from Richmond or from our army. These surgeons, up to the time of our arrival, were placed in a most trying and disagreeable position. From day to day they were obliged to make shift for bandages by bits of old canvas or strips of clothing such as they could pick up. Articles of hospital furniture were not to be had; even canteens and cups were deficient to such an extent that helpless men would sometimes call in vain for water to drink. Basins and sponges were scarcely indulged in, as they could not be obtained; and, with all the rest, the surgeons themselves were worn out and weak through their exertions, anxieties, and poor fare.

On examining several cases of limbs affected with gangrene, *always* of the moist character, it was observed that the injuries or wounds did not apparently afford mechanical obstruction in any way which would account for this result. Gangrene of this character is generally dependent on an obstruction to the returning circulation, but in the cases referred to we must look for some other cause. That which seems most plausible to me at this time is *anæmia*. These men were poorly fed; some ten or twelve days had passed during which life had been sustained at the expense of their own tissues, owing to the character of the food supplied. The appetite of a man with irritative or inflammatory fever could not be stimulated by presenting him a slice of fat bacon or unleavened bread; raw flour mixed in water was the only bearable substance, yet there was not sufficient of this for a proper supply of nutrition. As the warmth of animal life depends upon a sufficient supply of nutriment, it always follows that, when this supply is long deficient, the circulation becomes languid, and in the limb already inflamed from the injury, there is not the vital activity necessary for the reparative process. The first stage of this gangrene may therefore be properly termed *anæmic*. Next in importance to gangrene is secondary hæmorrhage, which, in military surgery, I believe to be due to the same cause as the former, viz. insufficient nutrition. In the majority of cases under my observation the patients were *anæmic*. In several suffering from inflammatory fever, weak, irritable, anxious, and restless, with hurried pulse and frequent respiration, bleeding to the extent of one to four ounces would prove fatal. Such cases have led me to believe that secondary hæmorrhage often is rather a concomitant than the proximate cause of death. A case of

resection of the shoulder-joint, with which some of you were conversant, was placed in the Potomac Creek Hospital, and under the immediate charge of a surgeon now out of the service. Secondary hæmorrhage to a small extent had made its appearance, compresses in abundance were applied; and, on inquiry by a friend who was interested in the case, it was found that the poor fellow was, and had been for some time, on low diet, and was complaining bitterly of being almost starved. He was ordered milk, eggs, and beef steak, with punch and porter additional, and plain water dressings applied. He recovered without a bad symptom, and has a very good arm.

These remarks are not by any means intended to show that real secondary hæmorrhage, of sufficient gravity to immediately destroy life, does not sometimes occur, but rather to show that such a result is the exception in military surgery, and that secondary hæmorrhage is far more liable to follow *anæmia* than *sthenia*. It follows that, to avoid the former, we should early furnish nutriment to the wounded as freely as they can bear, and of such quality as will support the system sufficiently, at least that the vital powers of the blood may not become weakened or impoverished.

American Medical Times.

SATURDAY, APRIL 30, 1864.

MEDICAL DEPARTMENT OF THE ARMY OF THE POTOMAC.

WHATEVER may be the future of the Army of the Potomac, it has gained a reputation for perfection of organization which will secure it a commanding position among the armies of history. The concurrent testimony of our best officers, and of those experts from abroad who have become familiar with its operations, unite in commending the rigor of its discipline, the completeness and efficiency of its internal arrangements, the harmony among all its departments, and the full and thorough appointment in each. It has been said of the Army of the Potomac that it would bear a defeat every day without losing its discipline and without becoming demoralized. It is certain that, after two years of campaigning, during which it has passed through more than a score of hard-fought battles without gaining a decisive victory, it is to-day one of the most compactly organized, best disciplined, and most completely appointed armies ever brought into the field, and prepared for any contest, however doubtful or difficult. But the medical department has special claims upon the attention of the country. Without detracting from the merits of the other branches of the army, we may say that the organization of the medical department has attained a degree of perfection which is found in no other army at home or abroad. We propose to notice briefly the progress of the medical staff of the Army of the Potomac to its present very perfect and efficient organization.

The misadventure of the first battle of Bull Run revealed the defects in the organization of the medical staff. Surgeon W. S. King, the first Medical Director of this army, had labored assiduously to perfect his plans and give efficiency to the staff, but, with the undisciplined force at his command, he was able to attain but partial success. But even on that disastrous field the medical staff exhibited those qualities of heroism and devotion to duty which

only required more system and method to have fully equalled the exigencies of that occasion. On the reorganization of the army under GEN. McCLELLAN, SURGEON CHAS. S. TRIPLER became Medical Director. DR. TRIPLER brought to the discharge of the responsible duties of reorganizing the medical department great experience, untiring zeal, and practical familiarity with every detail. He proceeded at once to introduce needed reforms, and to give them effective development. The personnel of the staff was greatly improved by the addition of brigade-surgeons, many of whom were among the most eminent civil practitioners. During the early movements of the army from Washington to the Peninsula, and onwards to the Chichahominy, DR. TRIPLER had to contend with and surmount obstacles of the most formidable character. At every point he met with delay and disappointment. All the appointments of this large army were then new and untried, and it required the highest order of executive ability to manage this as well as the other branches of the service. Under the circumstances, we believe, DR. TRIPLER's administration was entirely successful. He received the commendation of the Commanding General, of the corps commanders, and of all who were acquainted with the details of his management.

SURGEON JONATHAN LETTERMAN assumed the duties of Medical Director during the seven days' retreat—a critical period in the history of the campaign. It was not until the army was encamped on the James river that he was able to give his attention to reforms. The task which DR. LETTERMAN had before him was to effect such an organization of the medical corps as would direct its labors to the best advantage. This involved, 1. The organization of an ambulance corps, capable of efficient action, and reliable in every emergency. 2. The establishment of a hospital system suited to the demands of the sick and wounded. 3. A purveying department, which should at all times effectually subserve the wants and interests of the medical department.

The ambulance system, finally adopted after much experience, may be briefly given in the following abstract from a note by an army surgeon:—"The corps is a unit, and the supreme control of the ambulances is confided to the Medical Director of the army corps. The ambulances are in the proportion of three to a regiment; three men are assigned to an ambulance—one driver and two stretcher-bearers. This gives nine men to a regiment, who are commanded by a non-commissioned officer mounted. The above constitutes the regimental ambulance corps, which, consolidated by brigades, are commanded by a Second Lieutenant. The brigades are consolidated into divisions, commanded by a First Lieutenant, who consequently has under his command two Second Lieutenants, fifteen Sergeants, and one hundred and thirty-five men. The three divisions consolidated make the corps commanded by a Captain, under the immediate command of the Medical Director. There is one light medicine wagon and three six-horse supply wagons for each brigade. When a movement is ordered, the sick are taken up by the trains of their respective divisions, the regimental hospital wagons are ordered to join the trains, and thus the whole of the hospital appliances of each division, in one compact column, follows close upon its own division, under the command of the Ambulance Officer. Two medical officers, with steward and nurses, are detailed to accompany the

train and to take charge of the sick in it. Upon halting, hospital tents, to the number sufficient to accommodate the sick, are pitched, a hospital is rapidly established, all the aid necessary being rendered by the ambulance corps; the train and hospital are close to the camp of the division. In battle the stretcher-bearers march with the regiments to which they belong into the action. The Medical Director, with the Captain of the Ambulance Corps, is with the General commanding the corps at the front. As soon as the positions into which the divisions in battle will be thrown are ascertained, the Medical Director communicates with the Surgeon-in-Chief of division, designating the places where the division hospitals are to be located. These hospitals are composed of the hospital tents in the division, together with a house or barn, if available. The ambulances are drawn up between the hospitals and the division in front, awaiting orders. One officer of the ambulance train is with the Division Commander, one non-commissioned officer with each brigade. The Medical Officers who accompany the regiments into action take position by brigades, in some sheltered location contiguous to their respective brigades. This position is known to the Sergeant watching the brigade, who directs the wounded with stretcher-bearers thither. The ambulances are ordered up to the same place, to take the wounded to the division hospitals in the rear. The officer at division headquarters, as soon as the action begins, orders up the ambulances and designates the point to which they are to go. He learns from the Medical Director or Corps Officer the various positions and shiftings of the troops, and acts accordingly. In this manner the operations of the Ambulance Corps are conducted throughout the action and subsequent to it, until all the wounded are removed from the field to the division hospitals in the rear, where they receive professional and all other treatment necessary."

The hospital system is as follows:—Previous to an engagement, there is established in each corps a hospital for each Division, the position of which is selected by the Medical Director of the corps. The organization of the hospital is as follows:—1st. A Surgeon in charge; one Assistant Surgeon to provide food and shelter, etc.; one Assistant Surgeon to keep the records. 2d. Three Medical Officers to perform operations; three Medical Officers, as assistants to each of these officers. 3d. Additional Medical Officers, Hospital Stewards, and Nurses of the Division. The Surgeon in charge has general superintendence, and is responsible to the Surgeon-in-chief of the Division for the proper administration of the hospital. The Surgeon-in-chief of Division details one Assistant Surgeon, whose duties are to pitch the hospital tents and provide straw, fuel, water, blankets, etc., and organize a kitchen. The Cooks, Hospital Stewards, and Nurses are placed under his orders. Another Assistant Surgeon keeps a complete record of every case brought to the hospital, and sees to the proper interment of those who die. The Surgeon-in-chief, under the direction of the Medical Director of the corps, selects three medical officers as the operating staff of the hospital, upon whom will rest the immediate responsibility of the performance of all important operations. In all doubtful cases they consult together, and a majority of them decides upon the expediency and character of the operation. These officers are selected *solely* on account of their known prudence, judgment, and skill. Three Medical Officers are

detailed to act as assistants to each one of these officers, one being selected to administer the anaesthetic. The remaining Medical Officers of the Division, except one to each Regiment, are ordered to the hospitals to act as dressers and assistants generally.

The Surgeon-in-chief of the Division exercises general supervision, under the Medical Director of the Corps, over the medical affairs in his division. He must see that the officers are faithful in the performance of their duties in the hospital and upon the field, and that, by the ambulance corps, the wounded are removed from the field carefully and with dispatch. Whenever his duties permit, he gives his professional services at the hospital; orders to the hospital, as soon as located, all the hospital wagons of the brigades, the hospital tents and furniture, and all the hospital stewards and nurses; notifies the Captain commanding the ambulance corps, or, if this be impracticable, the first Lieutenant commanding the Division ambulances, of the location of the hospital. No medical officer is allowed to leave the position to which he has been assigned without permission. No wounded are sent away from any hospital without authority from the Medical Director of the army. Previous to an engagement, a detail will be made by Medical Directors of Corps of a proper number of Medical Officers, who will, should a retreat be found necessary, remain and take care of the wounded.

The following regulations were established for the purveying department:—There are allowed the following supplies to a brigade for one month, for active field service, viz.:—One medicine wagon, filled; one medicine chest for each regiment, filled; one hospital knapsack for each regimental Medical Officer, filled. The Surgeon-in-chief of each Brigade requires of the Medical Purveyor these supplies, and issues to the senior Medical Officer of each regiment in his Brigade the medicine chests and knapsacks. The Surgeons-in-chief of Brigades issue to regimental Medical Officers such of the supplies from the medicine or army wagon as may from time to time be required. These issues are informal, the Surgeons-in-chief giving no invoices, demanding no receipts, but accounting for them as expended. These officers are especially directed, when they shall have drawn the monthly supply, not to divide it out among the regiments, but only to issue the articles at such times and in such quantities as they are needed for use, or to keep the medicine chests and knapsacks supplied. Supplies are only issued by the Medical Purveyor upon requisitions approved by Medical Directors of Corps, and these officers are particularly enjoined to revise all requisitions with care, that sufficient supplies may be on hand, and yet that no unnecessary expenditure be permitted. As far as possible, requisitions will be made but once a month, and special requisitions avoided as far as practicable. The supply allowed will be kept up, and Medical Directors will see, especially before a march or a battle, that timely requisitions are made and the supplies obtained. Should the welfare of the sick demand a greater amount than is given by the table, or for articles which are not allowed by it, they are given upon a proper requisition. The tables which follow afford a very liberal allowance of a large list of remedies.

Such is an outline of the reorganization which Dr. LETTERMAN effected in the Army of the Potomac. It will be seen that the reforms were radical, and developed under different heads a system of operations which covered the

whole field of medical service. Its utility consisted in reducing to harmony and concert of action every branch of the medical service, and in placing the right man in the right place. Unity and efficiency was the key-note of the reform proposed, and to this every other consideration had to yield. The entire Medical Staff of the army became a unit, and moved with the deliberation and precision of a single person. Of the practical value of these improvements we are now able to speak in the most unqualified terms. They have been put to the most rigid test, and have been found in the highest degree practical and effective. The Medical Staff of no army ever worked in such perfect harmony and subordination on the battle-field as that of the Army of the Potomac. The battles of South Mountain, Crampton's Gap, Antietam, Fredericksburg, Chancellorsville, and Gettysburg, have placed the most violent strain upon every detail of this organization, whether taken as a whole or in its separate parts, and yet it has never been found wanting. The prompt care of the wounded in these sanguinary battles was never exceeded under similar circumstances.

The highest attestation of the value of the present organization of the medical service of the Army of the Potomac is found in the unanimity with which it has been pressed upon the attention of Congress, and the recent almost unanimous action of that body in extending its provision to all the armies of the United States. Its system of field hospitals has in the main also been adopted by the Surgeon-General for all our armies. Too much praise cannot be awarded to Dr. LETTERMAN for the patient and intelligent zeal with which he has labored to establish and perfect the present organization of the medical service of the Army of the Potomac. Its conception could only occur to a mind apt in method and organization, and while of comprehensive grasp, yet trained by experience to the study of detail.

We have thus traced briefly and imperfectly the gradual development of the organization of the Medical Department of the Army of the Potomac. However complete the machinery of its other branches of service, the medical is now second to none in harmony and efficiency of action, and in the perfection of its details. To Dr. LETTERMAN is due the gratitude of the country for his perseverance in effecting these desired reforms. Twice he has been recommended for a brevet by his superior officers, and the President should not withhold this poor acknowledgment of his great services.

THE CARE OF THE SOLDIER.

THE marked success which has attended the great Fairs in behalf of the Sanitary Commission proves that the interest of the people in the care of the soldier does not abate with time and effort. An appeal in behalf of the army finds even a warmer response to-day than at the commencement of the war. But while we give our charities so freely to the great almoner of the people, we should not lose sight of the fact that the soldier is still the child of the Government, and that its all-bountiful hand supplies him with all that is necessary to his calling. It feeds and clothes him while in health, and in sickness makes the most ample provision for his comfort. No Government ever provided such a system of hospitals and endowed them with such a profusion of conveniences for the sick. In addition to the usual hospital ration, every luxury may be obtained by a

proper management of the hospital fund. The Medical Supply Table authorizes the issue, on proper requisition, to all hospitals, of barley, extract of beef, cinnamon, cocoa, extract of coffee, corn-starch, farina, gelatine, ginger, concentrated milk, nutmegs, pepper, porter, white sugar, black tea, and tapioca; together with whiskey, brandy, port, and Tarragona wine. The law of Congress approved Aug. 3, 1863, provides that there shall be allowed in hospitals, under such regulations as the Surgeon-General may prescribe, such quantities of fresh or preserved fruits, milk, or butter, or of eggs, as may be necessary for the proper diet of the sick. The Medical Department, under the able management of Acting Surgeon-General BARNES, was never better prepared for vigorous operations than to-day. Its work is all thoroughly systematized, its provisions are abundant, and its agents are schooled with long experience. With the Sanitary Commission to supplement its labors with its choice and never-failing stores, the country may rest satisfied that the soldier, during the approaching campaign, will have every care and comfort.

MEDICAL CALIGRAPHY.

A CASE of death by poisoning, occasioned by an error on the part of the druggist in putting up a prescription, occurred in this city last week. The prescription was not plainly written, and the druggist was old and his eyesight poor. The jury in their verdict censure the druggist for attempting what age and eyesight had incapacitated him from doing properly. The conclusion of the jury that all physicians should write their prescriptions "plainly, distinctly, and in full," is sensible and well stated. The manner in which physicians generally write their prescriptions amounts to criminal carelessness. Frequently the paper on which it is written is begrimed, and perhaps is but the margin of a newspaper; the pencil marks are scarcely legible, and the handwriting is in the most undecipherable hieroglyphics. If any one doubts the statement let him examine the files of prescriptions at any druggist's store. The physician presumes too much upon the good-nature of the druggist, who has to decipher oftentimes at great loss of time and with unwearied patience his wretched chirography. If he fail to make out clearly the meaning of the writer he must put up a harmless remedy of some kind, or at great inconvenience send the prescription back to the prescriber, or, finally, run the risk of an indictment by a grand jury. A little care on the part of medical men in the preparation of their prescriptions would save a vast amount of trouble, and occasionally the life of a patient.

TREATMENT OF SUSPECTED CRIMINALS.

WHOEVER has peered through the grates of one of the cells of our city prison and marked the wan, gaunt, cadaveric-looking inmate, groping about in his damp, dismal, and sunless abode, has shuddered as he unconsciously asked what heinous and unpardonable crime could this person have committed that he is thus consigned to a living grave. The reply is, that he is only *suspected* of crime and is waiting his trial. And that trial may have been delayed from month to month, until years even elapse before his guilt or innocence is proven. It has not unfrequently happened that the prisoner has become so weary of his imprisonment that, rather than endure longer his dreary life, he has committed suicide. A case illustrating this crime against prisoners has lately occurred in France, and has excited much

criticism in the medical periodicals. A gentleman of excellent character was incarcerated on the deposition of a disreputable person, and for eight months was subjected to rigorous discipline. Wasted, with impaired health, he appeared in court, and, after a searching trial, was acquitted. This case has been repeated in our courts very frequently. The system of confining alleged criminals, in practice in this country, needs instant and radical reform. The theory of the law is, that a prisoner is innocent until he is proved to be guilty. We hold, then, that until he is proved to be guilty, the prisoner deserves to be treated as an innocent person. We should have houses of detention provided with all the comforts of home, or such bonds or legal restraints as will secure the conviction of the guilty without violating every principle of humanity in our treatment of those simply suspected of crime.

Reviews.

A PRACTICAL TREATISE ON FRACTURES AND DISLOCATIONS.

By FRANK HASTINGS HAMILTON, A.B., A.M., M.D., Medical Inspector U.S.A., Prof. of Military Surgery and Hygiene, and Fractures and Dislocations, in Bellevue Hospital Medical College, etc., etc. Second edition, revised and improved. Illustrated with two hundred and eighty-five wood-cuts. Philadelphia: Blanchard and Lea. 1863. Pp. 751.

It is not often that a medical work is placed in our hands which, in itself, gives evidence of the entire qualification of the author for the task undertaken; too frequently there is that lack of symmetry in the various portions of a treatise which proves the writer's one-sided capacity. On every page, however, of the work before us, we recognise the hand of one who is entirely master of his subject. We consult it with that confidence which few other volumes in medical literature can inspire. This treatise has been regarded at home and abroad as one of the most successful and most creditable American medical works. The issue of the second edition in so short a time proves the high appreciation in which it is held by the profession of this country; and the proposal of the New Sydenham Society to publish an edition in England gives the highest proof of the estimation in which it is held abroad. We have but a word to say of the present edition. It bears the evidences of careful revision throughout, but the changes are few and important. At the close, a complete but short chapter on gunshot fractures is added. The rules laid down for the treatment of these lesions are founded on Dr. Hamilton's experience, and thereby derive additional weight. This is a book which every general practitioner needs.

THE PRINCIPLES AND PRACTICE OF OPHTHALMIC MEDICINE AND SURGERY.

By T. WHARTON JONES, F.R.S., Prof. of Ophthalmic Medicine and Surgery, in Univ. Coll., London, etc., etc., with one hundred and seventeen illustrations. Third and revised American edition, with additions from the second London edition. Philadelphia: Blanchard and Lea. 1863. Pp. 455.

THE author of this volume aimed to produce a work on the diseases of the eye which should serve at once as a text-book for students and as a book of reference for practitioners. It is a work of simple details, with but little discussion of the principles or practice of ophthalmology. It will serve a good purpose in the hands of the practitioner for mere hasty reference, but for intelligent study of any given subject it is very deficient. The editor, Dr. Atlee, has added largely to the volume, and his notes enhance its value.

Correspondence.

ADVERTISING BY SPECIALISTS.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—Allow me to make some remarks in reference to the communication of "*Mens conscia recti*" in a late issue. The *London Lancet* has criticised the advertisements of specialists in America, and "*Mens conscia recti*" seems not to see that its editorial is more an indirect blame of the American medical profession than a reproach to that small number of specialists who hitherto have resorted to advertisements, with large capitals, in the medical periodicals of the United States. The *Lancet's* reproach to the American system is contained in the statement that in England the question of specialties is settled by admitting them "in the bosom of hospitals and centres of instruction, where they can serve purposes of education and progress." "Left to themselves," the *Lancet* says, "they grow rank and overrun the plain in lawless outgrowths." This is the point, sir. If every effort is made in the United States to stigmatize specialists, to take from them every opportunity of showing their capacity; if the professorships to which they are entitled are withheld from them, or given to the incompetent tools of certain cliques; if the profession does not take measures to protect legitimate specialism, practised by regularly admitted M.D.'s, against the miserable practices of advertising quacks, ci-devant corn-cutters, and spectacle-venders, then, sir, the time is not distant when specialists will be bound to take their own defence, and to vindicate their rights before the public, in that way which they may deem proper.

In England this question is different. Quackery in the American fashion is impossible on account of the law and the social influence of medical men, which in this country is far below the European standard. The whole subject will soon be discussed before the Am. Med. Assoc., and it seems to me that if the measures advocated by the New York County Medical Society are endorsed by that body, the breach between general practitioners and specialists will become irreparable. For it is clear that if a general practitioner has a right to state in public prints that he practises physic, a specialist may announce that he attends only to such and such a class of diseases. Specialists exist, and will exist and increase, and it is palpable that they can only abide by the code of ethics of the Am. Med. Assoc., if they receive the full support of that body as equivalent. But they never can be forced either to give up their position as specialists or return to the ranks of general practitioners, and can well afford to seek for "improper" channels of celebrity or notoriety which are open to them, if those which are considered "legitimate" are closed to them by the prejudice and injustice of the profession at large.

NUNQUAM RETRORSUM.

Army Medical Intelligence.

ASSISTANT SURGEON-GENERAL'S OFFICE, }
LOUISVILLE, KY., March 15, 1864. }

1. The practice of employing soldiers, whether of the Invalid Corps, acting as nurses, or enlisted men detailed as such, or men on the sick report, as private servants, cooks, or hostlers, is strictly prohibited in the General Hospitals of the Western Medical Department.

2. Medical Inspectors and Directors will promptly report any deviation from these instructions, and Surgeons in charge of General Hospitals will be held strictly accountable for their execution.

R. C. WOOD,
Assistant Surgeon-General, U.S.A.

HEADQUARTERS, DEPARTMENT OF THE GULF, }
NEW ORLEANS, March 11, 1864. }

For the better preservation of the public health, and to protect, as far as possible, citizens and soldiers from epidemics or contagions, a Commission is hereby appointed to investigate, consider, and report upon the sanitary condition of the city and its vicinity, and to recommend such precautionary measures as may be necessary to insure public health. The attention of the Commission is specially directed to the subject of intra-mural burials, drainage, quarantine regulations, tenements of the poor, and any and all other prolific or proximate causes of disease or contagion.

Dr. J. V. C. Smith, Dr. C. Faget, and Dr. Daniel C. Holiday, will constitute this Commission. A liberal compensation will be made for their services, and a prompt attention to their duties is requested.

The Provost Marshal General is authorized and directed to furnish the Commission quarters, and such assistance as may be by them required.

The Reports of the Commission will be presented to the Medical Director of the Department.

By command of Major-General Banks:

RICHARD B. IRWIN,
Assistant Adjutant-General.

SURGEON-GENERAL'S OFFICE, }
WASHINGTON, D.C., March 23, 1864. }

Medical Directors of Armies in the field will issue the "Classified Return of Wounds and Injuries received in Action," to the chief Medical Officers of Corps and Divisions, who will see that they are properly distributed.

This form, correctly filled up by the senior Medical Officer of the command engaged, will be transmitted, in duplicate, through the proper channel, to the Medical Director of the Army, within three days after every action.

The Medical Director of the Army will, as soon as possible, forward to the Surgeon-General a consolidated return of all casualties, according to the same form. He will at the same time transmit one copy of all Duplicate Returns received from his subordinate Medical Officers.

JOS. K. BARNES,
Acting Surgeon-General.

SURGEON-GENERAL'S OFFICE, }
WASHINGTON, D.C., March 22, 1864. }
WAR DEPARTMENT, ADJUTANT-GENERAL'S OFFICE, }
WASHINGTON, D.C., March 16, 1864. }

GENERAL ORDERS, No. 107.

CLOTHING OF SMALL-POX PATIENTS.—Hereafter, upon the discharge of soldiers from small-pox hospitals, the following articles of clothing will be issued to them gratuitously by the Quartermaster's Department:—1 pair trousers, 1 blouse, 1 shirt, 1 pair drawers, 1 pair socks, 1 cap. The infected clothing belonging to the men will be burned.

By order of the Secretary of War:

E. D. TOWNSEND,
Assistant Adjutant-General.

Respectfully furnished for the information of Medical Directors.

By order of the Acting Surgeon-General:

C. H. CRANE, Surgeon, U.S.A.

SURGEON-GENERAL'S OFFICE, }
WASHINGTON, D.C., March 24, 1864. }

All arrivals, transfers, discharges, desertions, and deaths of Paroled Prisoners, in General Hospitals, will be promptly reported to their Regimental Commanders.

By order of the Acting Surgeon-General:

C. H. CRANE,
Surgeon, U.S.A.

ORDERS, CHANGES, &c.

D. D. McKee, of Indiana, to be Hospital Chaplain, U.S.A., April 22, 1863; station, Baltimore, Md.
Charles Karsner, of Pennsylvania, to be Hospital Chaplain, February 23, 1864, Germantown, Pa.

John W. Reger, of Virginia, to be Hospital Chaplain, U.S.A., February 29, 1864, Grafton, Va.

On the recommendation of a Board, convened by Special Orders 255, War Department, series of 1863, and by direction of the President, Assistant-Surgeon Gerhardt Saal, U.S.V., is honorably discharged the service of the United States on account of physical disability, to date March 12, 1864.

Hospital Steward Oscar Palmer, 2d U.S. Sharpshooters, discharged to enable him to accept the appointment of Assistant-Surgeon, same regiment.

Hospital Steward Augustus F. Pietzcker, U.S.A., dishonorably, for drunkenness and neglect of duty.

Surgeon E. L. Fenham, 10th Missouri Cavalry, dismissed by direction of the President, for absence without leave.

Assistant-Surgeon John Claypole, 2d Delaware Vols., discharged, having declined to appear before a Board of Examination, convened under Section 10, Act of Congress, approved July 22, 1861.

Surgeon W. F. McCurdy, 87th Pennsylvania Vols., dismissed by direction of the President, for having been published officially February 24, 1864, for absence without proper authority, and having failed to appear before the Military Commission in Washington, within the prescribed time.

Hospital Steward David J. Bossler, U.S.A., to enable him to accept a commission in a Pennsylvania regiment, honorably discharged.

Surgeon David Larnabee, 84th New York Vols., examined by a Military Board, and an adverse report thereof in his case having been approved by the President, is discharged in accordance with Section 10, Act of Congress, approved July 22, 1861.

Surgeon G. M. Kausey, 95th New York Vols., has been granted twenty days' leave.

Surgeon Charles McMillan, U.S.V., and Assistant-Surgeon W. P. Grier, U.S.A., have been granted permission to visit Washington, D.C.

Surgeon W. M. Chambers, U.S.V., has been granted fifteen days' leave.

Surgeon J. M. Alder has been detailed as member of a Board to convene at Davenport, Iowa, for the examination of applicants for Commissions in the Invalid Corps.

Hospital Chaplain T. G. Carver has been assigned to the Clay General Hospital, Louisville, Ky.

Hospital Chaplain W. W. Meach, U.S.A., to the General Hospital, Bowling Green, Ky.

Assistant-Surgeon W. M. Notson, U.S.A., to duty as a member of the Board now in session at Washington, D.C., for the examination of non-commissioned officers for promotion in the Regular Army.

Surgeon C. C. Dumrecher, U.S.V., now on duty at San Juan Island, W. T., will report in person to the Commanding Officer, Fort Vancouver, W. T., to relieve Surgeon R. A. Christian, U.S.V. Surgeon Christian, on being relieved, will at once report in person to the Commanding General, Department of the Susquehanna, for assignment to duty.

Surgeon Charles McMillan, U.S.V., has been assigned to temporary duty in the Department of the East.

Surgeon Henry A. Martin, U.S.V., to duty as Surgeon-in-Chief of Contrabands, Newbern, N. C.

Act. Assistant-Surgeon Jacob Bradley, U.S.A., to Branch No. 1, Eruptive Hospital, Louisville, Ky.

Act. Assistant-Surgeon John M. Riely, U.S.A., to Camp Joe Holt, Ind., for duty with Invalid Corps.

Hospital Chaplain Wm. Holman, U.S.A., to Branch "A," Clay General Hospital, Louisville, Ky.

Act. Assistant-Surgeons Amos Pettijohn and James B. McCaffrey, U.S.A., relieved from duty at Camp Stanton, Md., to report to Medical Director, at Washington, D.C., for assignment to duty.

The Demarres General Hospital (Eye and Ear Infirmary), Washington, D.C., has been closed, and the patients transferred to Philadelphia.

The Crittenden General Hospital at Louisville, Ky., has been closed.

The following Officers have returned from leave, and resumed their duties:

Surgeon John H. Bayne, U.S.V., as Post Surgeon, at Fort Washington, Md.

Surgeon T. R. Spencer, U.S.V., as Surgeon-in-charge, 2d Division, General Hospital Alexandria, Va.

Surgeon E. W. Thurn, U.S.V., as Surgeon-in-Chief, 3d Brigade, 8d Division, 11th Corps, Army of the Cumberland.

Surgeon Josiah Curtis, U.S.V., has arrived at Knoxville, Tenn., and is waiting orders.

Surgeon J. C. Dorr, U.S.V., is relieved from duty in the Army of the Cumberland, and will await the acceptance of his resignation at Medford, Mass.

APPOINTMENTS.

Dr. W. S. Tremaine, of —, to be Surgeon of the 31st Regiment U.S. Colored Troops, March 25, 1864.

W. Sayre and H. C. Smith, of New York, A. P. Cole, J. W. C. Walker, M. C. Wilcox, J. W. Bailey and W. S. McCormick, of the Volunteers, J. Treddick and H. D. Wagoner, of Ohio, G. M. King, of Maryland, T. S. Floyd, of New Jersey, G. Huhn, of Minnesota, and W. F. Teulon, of Massachusetts, have been appointed Hospital Stewards U. S. Army.

Private B. F. Akley, Drafted Forces, 10th Congressional District of Pennsylvania, to be Assistant-Surgeon 9th Pennsylvania Reserve Corps.

Dr. Norton Folsom, of Massachusetts, to be Surgeon 45th U. S. Colored Troops, March 28, 1864.

Dr. Maurice Tucker, Acting Assistant-Surgeon U.S.A., to be Assistant-Surgeon 39th U. S. Colored Troops, March, 30, 1864.

T. M. Goodfellow, of Tennessee, to be Hospital Chaplain, U.S.A., Nashville, Tenn.

Paul Wald, of Pennsylvania, to be Hospital Chaplain, U.S.A., Baton Rouge, La.

J. B. Lathrop, W. G. Scott, U.S.A., C. E. McChesney, of New Jersey, E. A. Lewis and C. V. Robertson, of Ohio, John Miles, of Indiana, C. F. Bennett, of Missouri, H. J. Goddard, A. Faber and W. E. Vaughn, of New York, W. A. Barstow, of Wisconsin, F. C. Toplis, of Massachusetts, J. L. Smith, of Washington, and J. F. Sternberg, of Kentucky, have been appointed Hospital Stewards U.S.A.

RESIGNATIONS.

The resignation of Surgeon John J. Reese, U.S.V., has been accepted by the President, to take effect March 20, 1864.

ORDERS AMENDED.

So much of Special Orders No. 91, February 25, 1864, from the War Department, as discharged Hospital Steward Thomas Williams, Scott's "900," New York Cavalry, has been revoked.

So much of Special Orders No. 82, February 19, 1864, from the War Department, as assigned Surgeon D. McKibbin, U.S.V., to the Department of the Susquehanna, is suspended until his duties as member of the Board for the examination of applicants for commissions in the Veteran Reserve Corps, is completed.

DISCHARGED, DISMISSED, ETC.

Surgeon Samuel G. Lane, 5th Pennsylvania Reserves, honorably mustered out March 10, 1864, he having been appointed Surgeon to the Board of Enrolment, 16th District of Pennsylvania.

Andrew McLetchie, Assistant-Surgeon 79th New York Volunteers, dismissed by sentence of a General Court Martial, for drunkenness, conduct unbecoming an officer and a gentleman, and disobedience of orders, March 16, 1864.

Hospital Steward A. H. Klein, U.S.A., honorably discharged at his own request.

Assistant-Surgeon Horace B. Porter, 7th Connecticut Vols., honorably discharged at the request of the Governor of Connecticut, to accept another commission.

Assistant-Surgeon George King, 16th Massachusetts Vols., honorably discharged at the request of the Governor of Massachusetts, to accept another commission.

ASSIGNMENTS.

Surgeon E. McDonnell, U.S.V., is relieved from duty in the Department of the Gulf, and will report to the Commanding General, Middle Department, to relieve Surgeon C. W. Jones, U.S.V., in charge of the Newton University Hospital, Baltimore, Md.

Surgeon Jones on being relieved will report to Assistant Surgeon-General R. C. Wood, at Louisville, Ky., for assignment to duty.

Surgeon Joseph S. Hildreth, U.S.V., is relieved from duty at Washington, D.C., and will report to the Medical Director, Northern Department, for duty at Chicago, Ill.

Surgeon Samuel Kneeland, U.S.V., has been assigned to duty in charge of the University Hospital, New Orleans, La., and as member of the Board in session in that city for the examination of caudates for admission into the Corps d'Afrique.

Surgeon J. D. Brunley, U.S.V., to duty as Surgeon-in-Chief, 1st Division, 4th Corps, Army of the Cumberland.

Surgeon N. R. Derby, U.S.V., to duty as Medical Director, Red River Expedition, Brigadier-General A. J. Smith, Commanding.

Surgeons Gideon Palmer and William Grinstead, U.S.V., to the Army of the Cumberland.

Surgeon Frederick Lloyd, U.S.V., as Surgeon-in-Chief, 8d Division, 14th Army Corps, Army of the Cumberland.

Surgeon R. Keyburn, U.S.V., as member of the Board for the examination of Assistant-Surgeons of Volunteers, at Washington, D.C.

Surgeon R. H. Gilbert, U.S.V., as Medical Director, 14th Army Corps, Army of the Cumberland.

Surgeon S. W. Gross, U.S.V., as Medical Director, District of Florida, Jacksonville, Fla.

Surgeon E. W. Thurm, U.S.V., as Surgeon-in-Chief, 8d Division, 11th Corps, Army of the Cumberland.

Surgeon Sanford B. Hunt, U.S.V., as Assistant Medical Director, Northern Department, Columbus, Ohio.

Assistant-Surgeon A. M. Signund, U.S.V., is relieved from duty at Camp Douglas, Ill., and will report in person to Captain J. C. Peterson, 15th U.S.I., President, Board of Transfer to the Veteran Reserve Corps, now in session at Nashville, Tenn., or elsewhere.

Assistant-Surgeon Joseph C. Bailly, U.S.A., is relieved from duty in the Army of the Potomac, and will report to the Commanding General, Department of the East, for assignment to duty.

Assistant-Surgeon John S. Billings, U.S.A., is relieved from duty in the Department of the East, and will report to the Commanding General, Army of the Potomac, for assignment to duty.

Surgeon Artemas Chapel, U.S.V., is relieved from duty in the Army of the Potomac, and will report to the Commanding General, Middle Department, to relieve Surgeon Thomas H. Bache, U.S.V., in charge of General Hospital, West's Buildings, Baltimore, Md.

LEAVE OF ABSENCE.

Leave of absence has been granted to the following named Medical Officers:—

Surgeon W. C. Beunett, U.S.V., for twenty days from the Army of the Cumberland.

Surgeon D. G. Brinton, U.S.V., for twenty days from the Army of the Cumberland.

Surgeon F. G. Snelling, U.S.V., to await acceptance of his resignation from Department of Virginia and North Carolina.

Surgeon Edwin Bently, U.S.V., for six days from the War Department.

MISCELLANEOUS.

Hospital Stewards William Logan, Michael O'Brien, Joseph Leonard, and Charles Steelhaumer, having completed their examinations, have been ordered to return to their stations.

Surgeon Thomas W. Fry, U.S.V., has returned to Louisville, Ky., from duty as witness before General Court Martial in Washington, D.C.

General Hospitals Nos. 5, 8, and 11, at Louisville, Ky., have been closed.

General Hospital No. 14, Beaufort, S. C., has been reopened.

Assistant-Surgeon Wm. A. Banks, U.S.V., is on duty with Battery "B," 5th U.S. Artillery, Martinsburg, Va.

Surgeon James Bryan, U.S.V., has arrived at Pittsburg, Pa., and relieved Surgeon B. Beust, U.S.V., as Medical Director, Department of the Monongahela.

Surgeon A. H. Hoff, U.S.V., Medical Director of Transportation, has established his office at 61 Barclay street, New York.

Surgeon A. K. Egbert, U.S.V., has reported for duty at Presidio, San Francisco, Cal.

The following named Officers have returned from leave and resumed their duties:—

Surgeon J. B. Morrison, U.S.V., Vogdes' Division, Hilton Head, S. C.

Surgeon J. L. Teed, U.S.V., General Hospital No. 2, Nashville, Tenn.

Surgeon Pliny A. Jewett, U.S.V., Knight Hospital, New Haven, Conn.

Original Lectures.

LECTURES ON

GUNSHOT INJURIES OF THE ABDOMEN.

By FRANK H. HAMILTON, M.D.,

PROF. OF MILITARY SURGERY AND FRACTURES AT BELLEVUE HOSP. MED. COLLEGE, AND LONG ISLAND COLLEGE HOSPITAL; SURGEON TO BELLEVUE HOSPITAL; LATE MEDICAL INSPECTOR, U.S.A.

LECTURE VI.—PART I.

Second—Perforating Gunshot Injuries of the Abdomen.

Of these there are two classes, namely, those in which all of the important viscera have escaped a rupture or other serious lesion, and those in which more or less of the viscera have been wounded.

Let us consider, first, *those in which all the important viscera have escaped a rupture or other serious lesion.*

In the vast majority of cases, no matter what missile has been employed, if it has actually passed through the abdominal cavity, some of the contents of this cavity have suffered absolute lesion. The most frequent exceptions are found in the case of the smooth, round ball, and of smaller shot. The conical ball and the larger shot rarely turn aside themselves, or permit any of the viscera to move out of their way, in their course through the abdomen. But even these projectiles furnish a certain number of rare and almost unaccountable exceptions.

Much will depend upon the region through which the ball has penetrated, in estimating the chances that the viscera may have escaped. Thus it will be found that lesions of these organs occur most frequently in either of the hypogastric regions; and these wounds furnish the largest number of fatal results. In the remaining regions the serious internal lesion and the fatality of the wounds may be arranged upon a descending scale in nearly the following order:—Epigastric region, umbilical, right and left lumbar, hypogastric, right and left inguinal. Indeed so frequently do the viscera escape injury when the ball has passed through the inguinal regions, we cannot but conclude that, in very many of the examples, the missile has made its *trajet* below and outside of the reflections of the peritoneum.

My notes furnish me with six of these fortunate cases, five of which occurred in the inguinal region, and in all of these latter the bones of the pelvis were penetrated; one occurred in the lower part of the left lumbar region, and the bones of the pelvis were not injured. The cases are as follows:—

CASE I.—Clement Grant, a private in the 22d N. Y. Vols., Inf., was wounded Sept. 17th, 1862, at Antietam, by a ball which entered the right groin, above Poupart's ligament, between the external and internal inguinal rings, and escaped on the nates, a little to the outside of the right tuber ischii. He walked one mile after being wounded. About three weeks after the receipt of the injury I saw this man at Frederick City, Md. The wound upon his nates was then discharging pus quite freely, and he only complained of occasional pains in the right thigh. It is probable that some of the pelvic bones were broken, but no fragments had escaped. None of the viscera of his abdomen had suffered injury, and there was no tenderness over the abdomen, except near the anterior wound.

CASE II.—George Knoll, of the 7th Va. Vols., was wounded at Williamsburg, Va., in May, 1862. A ball entered just back of the left trochanter major, and passing forwards and towards the centre of the body, made its escape in front near the situation of the internal abdominal ring. The wounds were treated with cool water dressings. He was only confined to his bed five days, and in a short time he returned to his regiment perfectly sound. I saw him after the battle of Antietam, lying in the hospital under treatment for a wound of the thigh which he had just received.

AM. MED. TIMES, VOL. VIII., No. 19.

CASE III.—Jasper Haynes, private, 157th N. Y. Vols., 11th corps, wounded at Gettysburg, first day (July 1, 1863), by a conical ball, which entered just above the anterior superior spinous process of the ilium, on the left side, and escaped on the back, passing through the left side of the pelvis, near the sacrum. He immediately fell to the ground, and felt numb over his whole body and faint. The wound bled very freely, but he soon arrested the bleeding by a silk handkerchief made into a wad and secured by a towel tied about the body. He lay upon the field twenty-four hours. No treatment was subsequently adopted, except the application of a piece of adhesive plaster and cool water dressings over the whole side of the abdomen. Peritonitis was developed within a short time, and then warm flaxseed poultices were substituted for the cold water dressings. A number of fragments of bone have escaped, and other fragments can still be discovered in the wound. Suppuration continues after the lapse of nine months. Fæces have never escaped through either wound.

The fragments of bone in this case have, no doubt, perpetuated the suppuration; and, as they came alone from the pelvis, near the point of exit of the ball, and must have lain between the bone and the integument, they ought to have been removed at the first dressing, by the surgeon.

CASE IV.—A Confederate soldier of the 51st Ga. was wounded at Antietam by a conical ball weighing one ounce. The ball entered back of the right trochanter and passed out through the left side of the abdomen in front, about opposite the internal abdominal ring. The patient found the ball projecting partly through the skin, and pulled it out himself. Twenty-three days after, I found him free from fever and with but very little inflammation, the wounds discharging moderately. No fecal matter or urine had ever escaped by the wounds. He had been treated by rest and cool water dressings alone.

CASE V.—While I was stationed at Yorktown, Va., on the staff of that gallant and vigilant officer, Major-General Keyes, the enemy made frequent attempts to surprise and drive in our outposts. On one of these occasions, the 9th of September, 1862, a force of rebel cavalry fell suddenly upon the camp of the 5th Pa. cavalry, stationed near Williamsburg. Among the wounded who were brought in and placed under my care was private Jacob Walter, who had received a round ball, perhaps a large pistol ball, through the right wing of his pelvis; after penetrating the bone it passed forward about four inches, and made its escape just in front of the anterior superior spinous process of the ilium. The hole through the bone was round and smooth, admitting easily the forefinger of my right hand; and it was evident, from its course through the integument, muscle, and bone, as compared with its course after it had entered the cavity of the belly, that its direction had in some way been changed, the deflection from its original course being, at the point of exit, at least fifteen degrees.

The viscera of the abdomen were not wounded; the shock from the injury was very slight; and when I last saw this man, a few days later, the wounds were doing well.

CASE VI.—On the same occasion I dressed the wounds of E. A. Hass, a private in the same regiment, who was shot through the lumbar region, on the left side, just above the top of the pelvis, the wounds of entrance and of exit being about seven inches apart. In this case also the intestines were uninjured and the wounds closed rapidly.

There are many cases in which we are not able to declare at once, in the first examination, whether the viscera have been ruptured or not. It will seldom if ever be proper to introduce a probe or to lay open the wound for the sole purpose of deciding this point. If blood passes by the stomach or bowels, or if the contents of the hollow viscera escape externally, the diagnosis is clear; the presence or absence of tympanitis is also a sign of great importance, and in some cases the internal effusions can be plainly made out. Very much may be inferred, moreover,

from the severity of the symptoms and from their persistence or steady increase in gravity; but it is possible that very grave symptoms may ensue, and even death may result speedily, when there has been no such lesion. It will be impossible, therefore, in some instances, to make out the diagnosis fully until the results have been obtained, and even then it is often a negative rather than any positive testimony upon which we must rely.

If, then, no blood is thrown from the stomach or is passed by the bowels; if the faintness, nausea, and prostration are only moderate; if the patient suffers but little pain, and there is no tympanitis; if the consequent peritoneal inflammation is not great, and percussion gives no indication of effusion; finally, if after the lapse of several days none of the contents of the viscera are found to escape through the wounds and the general symptoms continue to improve, it will be fair to assume that no important internal organs have suffered serious lesion. And to this conclusion we shall arrive with additional assurance if the wound is situated in the inguinal region or in the lower part of the lumbar.

The treatment of these injuries ought always, at least so long as a doubt remains in relation to the exact diagnosis, to be based upon the same principles which are to govern the treatment of gunshot wounds penetrating the viscera. After having made such an examination of the wound of entrance as may be necessary and proper to determine whether any foreign substance has entered and been left in the track near the point, both orifices should be immediately closed. The patient should be laid in bed in such a position as to secure rest and relaxation of the muscles; the stomach should be kept empty and the bowels quiet with opium; warm fomentations should be applied, and such antiphlogistic remedies employed as the circumstances may indicate. In no case ought the probe or the fingers to be introduced beyond or through the walls of the abdomen in search of foreign substances or for the purpose of determining the nature and extent of the injury. Upon all these points I shall speak more at length hereafter when treating of those examples in which the viscera have been actually wounded.

In the January number, for 1859, of the *Buffalo Medical Journal*, I published an account of a case of perforation of the belly by an iron rod, which occurred in the practice of Dr. Throop, Luzerne Co., Pa. The report is substantially as follows:—In February, 1845, a young man, aged about twenty-five, a harness and saddle-maker by trade, got upon a table for the purpose of speaking through a trap-door with a shoemaker who occupied the room above him. The shoemaker, in sport, offered to throw a last at the saddler's head; in dodging to avoid which, the latter lost his balance, falling forwards, and encountering in his descent an iron rod used for filling collars, which was four and a half feet in length, nearly half an inch in breadth at the point, and expanding rapidly to a breadth of five-eighths of an inch, but slightly flattened in the opposite diameter. The surface of the rod was rough, having been only recently forged by a common blacksmith. It entered the abdomen four inches below the umbilicus and two inches to the right of the median line, and came out upon the back on the same side, two inches from the centre of the spine and about opposite the last dorsal vertebra. He immediately arose and pulled out the rod himself; he then walked across the street and sent for Dr. Throop; Dr. T. examined the wounds, which had bled only a few drops, and closed them with adhesive plaster. The patient was ordered to be kept upon a low diet, and his bowels were to be moved occasionally by an enema.

Dr. A. Knapp, who reported this case to me, saw him on the eighth day after the accident, and found him sitting up in bed amusing himself with his violin. He declared that he had suffered no pain except a slight stinging sensation when he drew out the rod, and that he now felt no inconvenience except from hunger and the consequent exhaustion. Subsequently Dr. Knapp saw him at work at his trade as usual, his recovery being complete.

Guthrie relates a very similar case, a soldier having been completely transfixed by a ramrod. The small end entered about two inches below the umbilicus, and, penetrating the second lumbar vertebra, protruded an inch and a half on the opposite side. It was removed, and his recovery took place in a short time and without a single grave symptom.

Original Communications.

CERTAIN POINTS IN THE SURGICAL TREATMENT OF DISEASES OF THE RECTUM.*

By W. H. VAN BUREN, M.D.,

PROFESSOR OF ANATOMY IN THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF THE CITY OF NEW YORK.

My motive in asking the attention of the Academy to *certain points in the surgical treatment of diseases of the rectum* is to elicit the experience of its members, and to determine the actual value of certain remedial measures I have employed for some time past, which seem to me to possess a decided advantage over the modes of treatment in general use. I have nothing original to propose, and shall simply give my own experience in carrying out the ideas of others, which have not received the degree of attention which they appear to me to deserve; hoping thereby to contribute to the more ready relief of some of the most common and painful diseases encountered in the practice of our art.

My first point involves the consideration of the best mode of exploring the rectum by the aid of the speculum. Before the employment of anæsthetics, even with the variety of specula devised for the purpose, this procedure was, in my experience, unsatisfactory. The power of rendering a patient unconscious has proved of immense assistance; but, in order to effect the object thoroughly, it is necessary, after the full influence of the anæsthetic has been produced, to place the patient in a particular position, as well as to secure the best possible light. The position which I have found most advantageous is that employed by our colleague, Dr. Marion Sims, in his very successful operations upon the vagina and neck of the uterus, the superiority of which he first recognised and pointed out, as detailed in his paper on "Silver Sutures."

The patient is placed with the upper part of the trunk in a prone position, the front of the thorax in contact with the bed or table, the head on its left side, the left arm brought out at the left side and carried behind the back, the pelvis on its left side, with the thighs flexed at a right angle, and the buttocks exposed towards the light, and elevated sufficiently to permit the abdominal viscera to gravitate towards the diaphragm. These details may seem unnecessarily minute, but those who have witnessed the operations of Dr. Sims will bear witness that they are easily carried out in practice, and that the position secures great advantages to the operator by permitting the air to enter and freely expand the vagina, thus relieved from the pressure of superincumbent organs. In exploration of the rectum the same advantages are obtained as soon as the *sphincter ani* is dilated by the introduction of the speculum. The speculum I employ is a modification of that used for the vagina by Dr. Sims; the modifications consisting in the notch at its angle intended to receive the sphincter muscle, and thus to resist the tendency of the instrument to slip out when the muscle is put upon the stretch, and the alteration of the handle, which is so shaped as to clear the buttock when it is swept around, so as to bring all sides of the cavity of the gut into view. To facilitate still further this latter manœuvre, and to protect the stretched mucous membrane from abrasion, the edges of the blade are carefully rounded and turned inwards.

* Read before the N. Y. Academy of Medicine, December 16, 1863.

The speculum being introduced and the sphincter put upon the stretch with one hand, the other hand is used to draw away the parts on the opposite side of the orifice; and, the handle of the instrument being then gradually swept around, the light falls successively upon all sides of the exposed and expanded cavity. By the use of this manipulation applied to a patient in the position just described, I have frequently obtained a satisfactory view of the whole extent of the cavity of the rectum as high as its upper curve.

The next point to which I would ask your attention is the treatment of *fissure*, or, as the disease is more properly named, *irritable ulcer of the rectum*.

Fissure of the anus, or laceration of the mucous membrane of the rectum just within the anal orifice, is, I suspect, an accident of frequent occurrence, and it is almost invariably produced at stool by the effort of straining to extrude a mass of hardened feces. Most simple fissures thus produced probably heal at once and give rise to no subsequent trouble; but when the subject of the accident is in a disordered condition of system, or when the costiveness persists, and the passage of the hardened stools is of constant recurrence, the fissure is prevented from healing, and is transformed into an unhealthy and irritable ulcer, which soon becomes the seat of severe and stinging pain of a peculiar character, and singularly disproportioned in amount to the trifling extent of the lesion. This disease is well described by Curling, Quain, Ashton, and other writers on diseases of the rectum. The ulcer is generally, although not invariably, situated on the posterior wall of the gut, and it takes an oblong shape from that of the fissure in which it has its origin. In many cases its lower extremity can be brought into view by gently forcing apart the borders of the anal orifice.

The treatment advised by the authorities above cited for this most painful affection comprises two plans.

The first includes laxatives, enemata, and escharotics or healing ointments applied directly to the ulcer. If these means do not succeed, and their success is a rather rare exception to the rule, division of the sphincter ani by the knife, as first proposed by the French surgeon, Boyer, many years ago, is the alternative. This remedy is generally prompt and certain; but it is a cutting operation, requiring some little time for recovery, and patients, through exaggerated fear of the knife of the surgeon, will often continue to suffer rather than submit to it. There is another operation, not involving the use of the knife, and bloodless in character, which is equally prompt and sure, and which need not confine the patient to his bed more than a single day. I refer to *forcible dilatation* of the *sphincter ani* muscle. This process has been employed, I am aware, by several of my surgical friends; but I think that its simplicity, safety, and thorough efficiency as a substitute for the knife is not as generally appreciated by the profession as it should be. According to my belief, it is the proper remedy for the disease under consideration, and a glance at the pathology of irritable ulcer and the physiological condition of the sphincter muscle, will, I think, establish the position.

The immediate cause of the peculiar and insupportable pain of an irritable ulcer of the rectum is the constant and involuntary spasmodic contraction of the sphincter ani muscle, by which the sensitive sore is continually squeezed and pinched. This explanation is in accordance with the latest pathological researches. In the Transactions of the Academy of Sciences of Paris, of the eighth of June last, the result of certain experiments made in his laboratory by MM. Gianuzzi and Newrocki was presented by Prof. Bernard, of the College of France, as to the "influence of the nerves upon the sphincters of the urinary bladder and anus." This is their conclusion:—

"The preceding experiments appear to us to demonstrate that the sphincter muscles of the bladder and anus are, during life, in a constant state of tonic or involuntary muscular contraction, which state is due to the influence of their nerves."

Now, it is fair to infer that the presence of a painful ulcer, seated on that portion of the mucous membrane of the rectum which is grasped by its sphincter muscle, through the medium of reflex action, greatly intensify the nervous influence which stimulates this contraction. And the fibres of the muscle thus stimulated to constantly increased spasmodic effort are continually subjecting the already tender sore to the mechanical violence of compression and bruising, by which it is at the same time prevented from healing and rendered so exquisitely painful. It must also be remembered, as shown by Todd and Bowman, and Brown-Sequard, that the fibres of a muscle, when stimulated to action, either by the will directly, or indirectly by reflex irritation, do not contract simultaneously and then relax altogether; but that each separate fasciculus or bundle of ultimate fibres (the aggregate of which make up the muscle) contracts and relaxes by itself, each, to a certain degree, independently of its neighbor; and thus, like the keys of a piano under the fingers of a rapid performer, all these separate fasciculi, as long as the stimulating cause continues, are playing in succession upon the painful ulcer.

The pain thus produced varies both in degree and in duration. It may be slight and transient, or it may be almost insupportable in severity, and last eight or ten hours. The act of defecation itself is often accompanied by a slight degree only of soreness, and there is generally an interval of ease after the defecation before the peculiar pain of the disease sets in, and this interval is longer if the stool be solid in consistence.

If this view be correct as to the cause of the pain in this disease, it follows that any means by which the contractile power of the sphincter is interrupted or temporarily abolished will relieve it at once. Its division by the knife illustrates the fact. Now, it is well known that forcible stretching of muscular tissue will temporarily impair its contractility. The paralysis of the bladder which so often follows its over-distension in retention of urine, is an example of this. And thus it is explained why forcible dilatation or stretching of the anal orifice arrests at once the pain of an irritable ulcer of the rectum, and is followed by its speedy cure. That this result is safe, sure, and reliable, can only be demonstrated by clinical facts, and these I will endeavor to furnish.

Richard Quain, in his excellent treatise on diseases of the rectum, after stating that the interval that elapses between the evacuation of the bowels and the occurrence of pain varies from ten minutes to two hours, adds: "I cannot explain at all satisfactorily why an interval of time elapses between the application of the exciting cause and its effect; nor can I account for the variations in its length." To me it seems plain that the dilatation to which the orifice of the anus is subjected by the extrusion of feces during the act of defecation is sufficient to prevent the fibres of the sphincter muscle from resuming their full tonic contractility for a short interval, and that the length of the interval depends entirely upon the size and hardness of the mass extruded, and the amount of stretching to which the orifice has been subjected.

Now, the operation of forcible dilatation, as I have been in the habit of performing it, by introducing the two thumbs into the anus, flexing them so as to include the breadth of the sphincter muscle, and then, taking a purchase with the outstretched hands from either buttock, drawing them forcibly asunder until arrested by the ischial tuberosities, effects such a stretching of its fibres as to paralyze the sphincter for at least a week, during which time the ulcer assumes a healthy appearance and rapidly heals, the pain ceasing entirely from the time of the operation.

CASE.—A gentleman of 45 was under my care for chronic phthisis in 1861, and, through change of diet and habits, and removal to the country, improved very much in health. Early in the present year he came to the city for relief, having relapsed for several months in consequence of suffering severe "agonizing" pain after going to stool, which had led him to neglect the calls of nature. His

appetite was gone, and he was losing flesh. The present trouble has its origin in costiveness. He had no great pain at the time of defecation, but about half an hour afterwards an indescribable smarting, stinging, and boring pain would come on, and last for three or four hours. I suspected the cause of his trouble, and the next day, with the assistance of Dr. Foster Swift, had him etherized, and explored his rectum. On its coccygeal aspect, just within the verge of the anus, we saw an unhealthy looking ulcer, about the size of the finger-nail, with elevated edges and a dirty, yellowish surface. I stretched the anus with the thumbs, in the manner above described, and ordered a dessert-spoonful of castor oil at bed-time. The operation was followed by no pain, and the next morning he had a stool without pain—"just the slightest possible feeling of soreness"—as he described it, and much to his gratification there was none of the "agony" afterwards. It has never returned; and with proper care he has regained a very fair condition of health. He was confined to the house one single day.

CASE.—An English lady of 35 was sent to me by my friend Dr. Sabine, in 1861. She had been suffering excessive pain after defecation for more than a year, to relieve which she had resorted to the use of opium in considerable quantities. She was a woman of strong character and excellent morale, and, mortified by the habit she had acquired, she had determined to break it, and bear the "bitter pain," as she termed it, by embarking on a voyage to China to join her husband, without any opium in her possession, and with this resolution had come to New York. I examined the rectum, and finding an ulcer in the same part of the gut as in the last case, dilated the sphincter on the spot. A thrombus about the size of an English walnut formed around one side of the anus within a few minutes after the operation, but she complained of no after-pains. The next morning, accustomed to their use, she took an enema of tepid flaxseed tea, had a free evacuation, with very slight inconvenience, and no return of the "bitter pain." She went out every day, complained of little or no local soreness, and started on her voyage without any opium, and without any necessity for its use.

The thrombus in this case resulted from the rupture of a superficial vein. I have also, in several instances, lacerated the mucous membrane in dilating the anus, but have never seen the slightest trouble follow either of these accidents. The paralysed and quiescent condition of the sphincter after dilatation secures rest and protection from violence to the parts within its grasp, and the process of repair takes place at once, and is rapidly completed.

CASE.—A perfectly healthy young lady was married at 22, and within a month after her marriage injured herself whilst straining at stool. From this time the act of defecation was always followed at a variable interval by intense and insupportable pain of several hours' duration. To avoid this she resisted the desire to have a passage, and gradually lengthened the interval to a week or ten days, when she would take a dose of medicine and suffer for twenty-four hours. She was treated in a western city at different times for piles and stricture, and was even suspected to have cancer, but, procuring no relief, she finally came to this city last spring, having suffered more than two years. She described her suffering after stool as excruciating; it lasted from eight to ten hours. Her husband told me that sexual intercourse brought on her pain. I found the sphincter very much contracted, but the introduction of the finger discovered none of the hardness of cancer, nor any evidence of stricture within its reach; but a rough and exquisitely sensitive spot towards the coccyx suggested the existence of irritable ulcer. With the assistance of my friend Dr. Emmet, she was etherized, and by the aid of the speculum the ulcer was brought readily into view, presenting the appearance described in a former case. There was no other evidence of rectal disease. I dilated the sphincter at once and thoroughly, and in doing so produced two linear lacerations of the mucous membrane, each three-quarters of an inch in length. Very slight

soreness followed, and the next day, by the aid of a dose of castor oil, she had several large passages, which, for the first time in two years, were followed by no pain whatever. At my next visit her expressions of gratitude and surprise were very pleasant. At the end of a week we again used the speculum, and found the irritable-looking ulcer transformed into an innocent, healthy sore, with thin white edges and a granulating centre, presenting half its previous size. The lacerations produced by the operation had entirely healed, leaving no trace. She used daily enemata for another week, and then a dinner pill at night, as required, and when she left the city at the end of a month, was perfectly well.

Her long continued and severe suffering had given to this lady's face a painful expression, characteristic of her disease; and her complexion was sallow from habitual constipation. After her cure, the change in her appearance was remarkable.

I have been asked whether the paralysis of the sphincter ani, produced by forcible dilatation, is ever followed by incontinence or loss of control over the contents of the lower bowel. The relaxed and flabby appearance of the orifice of the anus after the operation certainly suggests this idea, and the fact that when the patient is asked to contract his sphincter by voluntary effort he generally expresses his inability to do so, looks in the same direction. But, in answer to the question, I must say that in upwards of twenty cases which have come under my observation, I have never seen any indications of incontinence, and that I believe the internal sphincter to be equal to any emergency likely to arise during the temporary suspension of the functions of the more powerful external muscle.

I have reason to believe that in some cases the muscular fibres of the sphincter are actually ruptured or torn in the stretching process; but no harm or delay in the cure has resulted from this. My colleague, Dr. W. R. Donaghe, tells me that, after doing the operation, he once felt distinctly through a laceration in the mucous membrane of the rectum a gap in the substance of the sphincter. The case did well, and the cure was perfect.*

This remedial measure has a wider application than to the treatment of irritable ulcer of the rectum. In inflamed hæmorrhoidal tumors, or any painful inflammatory affections of the anus, where the spasmodic contractions of the sphincter constitute the principal source of the pain and obstruction to the circulation, the stretching of the sphincter, with or without the intervention of an anæsthetic,

* The following is a note of Dr. Donaghe's case, which he has kindly furnished me:—

CASE.—Timothy McMahon, aged 45, a stout, well built laborer, came to the Denmit Dispensary, August 1, 1862, complaining of "pain in the lower end of his bowel after a passage." He stated that his bowels had been generally regular, and that during the last four years he had been troubled with bleeding once or twice a year, lasting four or five days. His present complaint began six months before his visit to the dispensary. He said that he had a passage every morning, causing some sense of soreness as it came out, and that when it was over, *without any interval*, there began "a great pain," which he likened to that felt by a woman in labor; that it lasted about four hours; that after its cessation he felt perfectly well until the next day; but when the pain was upon him he could do nothing, so great was his suffering, and consequently he had been obliged to give up his daily labor. On examination with a rectal speculum I found several small internal piles; and in front of the coccyx, on the upper part of the mucous membrane lining the external sphincter, there was a small round ulcer, a little larger than half a pea, with a reddish and ungranulating surface and slightly thickened edges. I touched it thoroughly with nitrate of silver, but without relief. On August 23d I gave him ether, and, introducing the index and middle fingers of both hands into the rectum, I pressed slowly but firmly towards the tuberosities of the ischia. During this movement I felt a distinct sensation of something giving way, which I supposed to be the sphincter muscle. After this occurrence there was no further resistance, but the margin of the anus became very lax. I examined with my finger towards the coccyx, and recognised a distinct laceration of its mucous membrane, the rough edges of which could be easily felt; the joint of my finger imbedded itself in the submucous cellular tissue. He complained of severe pain when the effects of the ether passed off, and I gave him a grain of opium. On the third and fourth days he had passages, and said that the "straining was not felt." On the eighth day I saw him again. He had had a passage every day without subsequent suffering. I examined the part with a Sims speculum. In front of the coccyx there was a vertical, oblong sore about three-quarters of an inch in length and half an inch in breadth, covered with healthy granulations. I did not see him again for several weeks, at the end of which time examination showed that the sore had entirely healed and the mucous membrane was in a state of perfect integrity. I have seen him a number of times during this year (1863), and he has had no sign of relapse.

will afford prompt and certain relief. It is equally applicable to the affection described by some authors as "spasm," and by others as "painful contraction" of the sphincter* and also in the "neuralgia of the anus" of nervous subjects and hysterical women.

I have been in the habit for several years past of employing this manoeuvre after the operation for the cure of hæmorrhoidal tumors, whether by ligature or the use of the *ecraseur*. The result has been always favorable. The patient is entirely saved from the severe pain, generally lasting several days, which is caused by the pinching of the tender and inflamed parts by the spasmodic contractions of the irritable sphincter. By throwing it out of play, the suffering after the operation is reduced to a very moderate degree of local soreness, and the necessity for the employment of the catheter, through sympathetic disturbance of the sphincter of the bladder, is abolished.

CASE.—I was requested by Dr. R. F. Clow, of W. 27th street, to see one of his patients, who had been suffering for many years with "bleeding piles," and who was at the time confined to his bed with a very painful aggravation of his malady. I found a gentleman of thirty, pale, nervous, and broken down by loss of blood, complaining bitterly of throbbing and lancing pain at the anus, accompanied by almost constant desire to go to stool. When he did so, he voided nothing but a little bloody mucus without relief; and this had lasted more than a week. On placing him in a position in which I could inspect the parts, I found a mass of inflamed rectum and hæmorrhoidal tumors protruding beyond and embraced by the sphincter; and detected also an elongated and unhealthy ulcer situated between two of the tumors. I greased my thumbs and gently introduced first one, and then the other, into the orifice in the centre of the protruding mass, and, grasping either buttock with the outstretched fingers, steadily and forcibly stretched the sphincter muscle. The pain was not as severe as might be supposed, and he allowed me to reduce the inflamed parts within the orifice. I promised him relief from his pain, and advised an operation for the radical cure of his piles and prolapse as soon as the inflammation should have subsided, and meanwhile that he should use a daily injection of tepid flaxseed tea with a Davidson's tube, to secure soft stools. At the end of a week I was informed that my operation had relieved the severe pain, and that he was ready to have his tumors removed. I explored his rectum the next day under ether, and found, in addition to the hæmorrhoids, not less than three ulcers, not very unhealthy in appearance, and situated between the tumors. I applied the ligature to four tumors, and finished by dilating the sphincter a second time. The patient had no severe pain after the operation, recovered rapidly under the judicious care of Dr. Clow, and presented himself to me at the end of a month entirely well and very much improved in health and appearance. He had a daily stool without pain, protrusion, or loss of blood, and was exceedingly grateful for the result.

I might continue to relate cases in which forcible dilatation of the sphincter ani has been employed with results not differing from those already stated, but fear to tire your patience. The cases I have described embrace most of the prominent points in connexion with the operation which my experience furnishes. I will only add that I have acquired great confidence in its efficiency as a substitute for the knife, and that its simplicity and the facility with which it is effected, together with its wide range of application as a prompt remedy in a common and very painful class of diseases, appear to me to justify its more general adoption as an established operation of surgery.

This operation was originally proposed by Recamier, of Paris, but I have been unable to find any record of its em-

ployment by his immediate successors. Some fifteen years ago I saw in the *Gazette des Hôpitaux*, of Paris, a proposition on the part of Maisonneuve to cure fissure of the anus by introducing the hand into the rectum, closing it firmly, and then withdrawing the closed fist by main force. This mode of operating met with no favor, although Maisonneuve states that he employed it successfully. Shortly after this I was told by my friend Professor Metcalfe, of this city, that he had stretched the sphincter ani in painful conditions of the anus with benefit.

Sedillot, in his *Operative Surgery*, published in Paris in 1855, speaks of forced dilatation as a remedy for fissure of the anus, and describes an operative process, but, gives no results. Nelaton, of Paris, also alludes to it in highly favorable terms as worthy of trial since the discovery of anæsthesia, but gives no experience. I have heard of its employment in this city by Dr. Gurdon Buck, Dr. John Burke, of East Broadway, Dr. Isaac Cummings, and others.

On the other hand, I can find no allusion to it in any of the English works on Diseases of the Rectum.

CASE OF EQUINEA.

REPORTED BY

JOHN A. SPENCER, F.R.C.S.I.

SURGEON 60TH REGIMENT (N. Y.), 2D BRIGADE, TYLER'S DIVISION, 22D ARMY CORPS, FAIRFAX STATION, VA.

PETER BRENNAN, æt. 46, of intemperate habits, a private in Company K, 69th Regt., was admitted into hospital on March 23, 1864.

Symptoms on Admission.—Pain, referred to the lower ribs on the left side, weakness, muscular trembling, costiveness. Pulse 75, fair; tongue moist and clean; temperature of skin normal; respiratory murmur and rhythm of heart natural. R Magn. Sulph. $\frac{3}{4}$ i.

History of the Case.—On the 15th inst. Brennan came to me with the statement that he was detailed to attend to an officer's horse, but that for the past few days he had not felt able to do his duty. Nothing abnormal could be detected on examination, and there were no data upon which to act, save the man's own story—that he did not feel well, and had a pain in his side; the question then arose, as to whether he was malingering, or suffering from pleurodynia. Finally it was decided to give him the benefit of the doubt, and accordingly he was relieved from duty for a few days and ordered to report occasionally, the following being prescribed: R. Ext. colch. fl. 10 min.; every two hours till it operates. R. Morphine sulph. gr. ss. each night at bed-time. On the 18th he came again, saying that he still felt unwell, though the pain was partially relieved; on this occasion a blister was applied to the affected part. His next visit was on the 20th, his complaint the same: R. Quin. sulph. gr. v. ter in die. The colchicum to be discontinued. On the 23d he was sent to hospital by Dr. Nealis, the Assistant Surgeon, who saw him in camp; he had to be carried thither on a stretcher.

Daily Reports.—March 24th.—He lies sunk down in the bed, on his back, with the knees drawn up; pulse 80, weaker than yesterday; tongue shows some disposition to dryness about the centre; does not answer at once when addressed; speaks of having great thirst; trembles like one in an ague fit; has had no rigor, as far as can be ascertained. Ordered the "Imperial" drink to be given him at intervals; a pint of beef tea for dinner. R. Liq. ammon. acet., a table-spoonful every third hour. 25th.—There is a dusky red hue about the nose and forehead; pulse 88, weak and compressible; tongue brown and dry in centre, red at edges and tip; bowels acted freely last night; motion healthy. Liq. ammon. acet. to be discontinued. R. Sp. frumenti $\frac{3}{4}$ ii., quin. sulph. gr. v., four times a day; body to be sponged with tepid water; hair to be cut close to the head. 26th.—Perspired profusely yesterday evening; the trembling persistent; pulse 80, not so weak as before; tongue brown and dry; there are three unhealthy-looking pustules noticed

* Boyer, *Traité des Maladies Chirurgicales*, etc. 4th edition. Tome x. pp. 139-150.

Dupuytren, *Leçons Orales*, tome iii., pp. 284-6.

Brodie, *Lectures on Diseases of Rectum*, in *Lon. Med. Gaz.* vol. xvi., p. 26.

Quain, *Diseases of the Rectum*, N. Y., 1855, pp. 177-180.

on the face, one at the root of the nose, between the eyebrows, almost large enough to fill this space, another on the forehead, and a third on the upper lip, below the left nostril. These three are precisely alike in appearance, and are each surrounded by a broad, dark livid margin. The attendant reports that the patient "wandered" during the night. Whiskey and quinine as before. 27th.—Last night he passed the fæces involuntarily; answers incoherently when spoken to; pulse 90, irregular and thread-like. The pustules noticed on the face yesterday have broken and discharged a thin, reddish, sanious fluid. The integument of the back is of a livid color, and there are patches of a similar hue on the lower limbs, which are also covered with pustules of about twice the size of those in small-pox; the scalp, too, is studded with these pustules. On the upper and anterior part of the left thigh is a tumour from one and a half to two inches in diameter; it is moderately hard, and if touched, the patient, semi-conscious, cries out. 8 P.M., pulse 120, intermittent; his fæces pass from him so frequently that it is necessary to have an India-rubber blanket kept under him and changed constantly; it is remarked that these discharges are very offensive. Directed a reliable man to remain up with him through the night and to give him an ounce of whiskey each hour as long as he could swallow. 28th, 8 A.M.—Could with difficulty swallow the stimulant. 10 30 A.M. Died comatose. No autopsy. The following points, connected with the case, may perhaps be considered worthy of attention:—

1. The absence of any marked febrile disturbance up to an advanced period of the disease. 2. The earlier symptoms simulating rheumatism. 3. The true nature of the affection being so completely masked till the pustules, etc., made their appearance. 4. The absence of the more aggravated symptoms of the disease in consequence, I think, of the poison acting upon the brain, and destroying life by that organ before the more horrible details of "glanders" had, as it were, time to be developed.

Before closing it is necessary to state that the horse Brennan had attended was, beyond all doubt, *glandered*, though in a sub-acute form. The animal (which I examined) had a persistent purulent discharge from the nostrils; small chancreous ulcers on the mucous lining membrane of those cavities, pustules on the skin, and the glands under the jaw were swollen, tender, and adherent.

Reports of Hospitals.

CLAY GENERAL HOSPITAL, LOUISVILLE, KY.

CASES OF CEREBRO-SPINAL MENINGITIS,

Communicated by ALEX. T. WATSON, M.D., U.S.V., Surgeon in Charge.

CASE I.—Reported by FRED. C. LEBER, A.A. SURG. U.S.A.—Alfred Lockwood, a private of the 41st Regt. Ohio Vols., was admitted into Branch A, Clay General Hospital, on March 25, 1864, at eleven o'clock A.M., from the Military Prison in this city. I saw him immediately after admission. No previous history. I found him lying upon his bed, apparently in a semi-comatose condition, the head slightly drawn back, and the muscles of the neck rigid. The eyes were injected, the pupils dilated and fixed. The temperature of the skin was normal, excepting the scalp, where it was comparatively increased. Pressure made over the cervical vertebra gave conclusive evidence of pain. Pulse 90, soft and full; respiration tranquil; tongue coated with a whitish, cream-like fur; no vomiting; abdomen slightly tympanitic. When roused and questioned regarding himself or relatives, he would invariably give the same answer. When placed upright upon his feet, he would reel and stagger like a person under the influence of intoxicating drink. *Treatment.*—Six cups to be applied to nape of neck and temples, and eight ounces of blood to be extracted. The head to be kept constantly covered with

cold cloths. A drop of ol. tigllii, made into a pill with bread crumbs, to be administered every hour, until his bowels are thoroughly evacuated. March 26th.—The nurse informs me that the patient has been very restless and talkative during the fore part of the night, but slept a little towards morning. Four drops of croton oil had been given, which produced three large evacuations. He has also passed a large quantity of high-colored urine; and I may here remark that during the whole course of the disease, the secretion of urine was increased. There is some improvement in the patient's condition; he is more rational, and answers questions put to him regarding his age, place of residence, etc., etc., pertinently and correctly. When left to himself he falls, however, into a state of busy, talkative delirium, and in his delirium he frequently carries the hand across his forehead, and cries out, "Oh, my head, it pains me so bad!" He is very restless, moving and tossing himself about in bed, and it requires the constant attention of one man to prevent him from falling out on the floor. Other symptoms the same as day before. R. Tart. emetic, gr. ij.; kali nitrici 3ss; Aquæ 3iv. M. A tablespoonful every two hours. March 27th.—During the night spots of irregular shape and various size made their appearance on various parts of the body. These spots are of a dark livid hue, not elevated above the surface, and do not disappear on pressure. They are thinly scattered over the entire surface, thicker around the joints, and most abundant on the lower extremities. The patient has been very restless during the night, throwing off his bed-clothes and making ineffectual attempts to get out of bed. His mind is now constantly wandering, and he does not recognise the physician, nor does he answer to a direct question. There is decided opisthotonos. The muscles of the neck are rigid and tender, and when attempt is made to raise him up in bed, he cries out from pain. The pupils are contracted; the whole face, but especially the lips and ælæ of the nose, is of a dusky hue; tongue coated with a yellowish white fur; bowels have operated once during the night, and he has passed urine freely. There is evidently increased thirst, as he frequently calls for water. When food is presented to him he takes it greedily. Pulse 96, soft, and rather weak; respiration natural. I requested Surgeon Alex. T. Watson, U.S.V., and A. A. Surgeon D. Cummins, U.S.A., to see the patient, which they had the kindness to do. At their suggestion, croton oil was rubbed in over the entire length of the spinal cord. The medicine and cold applications to head to be continued. March 28th.—The patient is no better; has passed a restless night, with no sleep; spots have somewhat faded since yesterday; bowels have not acted since night before last, but has passed urine freely; the right pupil is irregularly dilated, the left contracted; other symptoms same as day before. The croton oil did not produce the desired effect, in consequence of which it was reapplied. Tartar emetic mixture to be discontinued. A tablespoonful of the following medicine to be taken every fourth hour: R. Potassii iodidi 3j.; aq. dist. 3iv.; M. To have beef-tea. March 29th.—The report to-day is that the patient rested somewhat more comfortably during the night, but did not sleep. Nevertheless, he is perceptibly growing weaker, and it is evident, from the symptoms, that the case is progressing towards a fatal termination. The croton oil has not produced a very copious eruption, although thoroughly applied. Pulse 106 per minute, soft and weak; tongue coated with a brownish black fur in the centre, but still moist. His bowels have not moved since the 27th, and there is now retention of urine. Abdomen tympanitic; there is no sensible increase of temperature; the right pupil is still dilated, the left oscillating, and it is also observed that there is occasional subsultus tendinum. Ordered the iod. potassii to be continued, and a teaspoonful of the following mixture to be given every two hours: R. Tinct. hyoscyami 3ss.; aq. camphoræ 3ij. M. March 30th.—At my evening visit yesterday, I ordered the nurse

to give the patient a few more of the pills of croton oil, with a view to empty his bowels, and although four of the pills were administered, they did not have the desired effect. Purgative enemata proved equally useless in overcoming the obstinate constipation. The patient has now assumed the dorsal position, with his thighs and legs semiflexed; the toes flexed upon his feet, and the thumbs contracted and drawn into the palm of the hands. The subcutis has increased, and the patient is now constantly picking at the bed-clothes. His delirium is of a more passive character; he is incessantly talking; and his articulation is becoming difficult. His tongue is covered with a black crust, and his lips and teeth with sordes. Treatment to be continued; the head to be shaved, and a fly-blisters to be applied to the entire scalp. March 31.—Morning visit. The patient is fast sinking. The pupils are irregularly dilated; the eyes hollow and sunken; the tongue cannot be projected; pulse 130 per minute, small and weak; the hands and feet are livid and cold; the abdomen is excessively tympanitic; there is a short, hacking cough. Auscultation reveals hypostatic congestion of the lungs. Slight bronchial rattles are audible. Discontinue all former treatment. R. Amm. carb. 3 iss.; pulv. g. arab. 3 ij.; tr. opii 3 j.; aq. dist. 3 iv.; M. A tablespoonful every second hour. To have 3 j. of sherry wine every third hour. Evening visit.—On approaching the patient's bed it became evident that he was dying. The countenance is haggard and death-like; the eyelids are half open, the eyeballs immovably fixed, and the cornea has a dull, glazed appearance; the pulse is very rapid, irregular, and hardly perceptible; deglutition is entirely lost; the surface is covered with a cold, clammy sweat; respiratory movements are short and rapid, and the bronchial rattles are audible all over the room. Died at five o'clock A.M., April 1st. N.B.—It is hardly necessary to state that during the latter part of the disease his urine was regularly drawn off by means of the catheter. *Section Cadaveris—ten hours after death.*—The brain and spinal cord alone were examined. The dura mater was attached to the arachnoid in several places by recent adhesions. The arachnoid was thickened, and had lost its glossy appearance throughout its whole extent. Between it and the pia mater was a yellow, purulent mass, which was accumulated in the sulci of the cerebrum. The vessels of the pia mater were enormously distended with black, fluid blood. The fluid in the subarachnoid space was slightly turbid, and in larger quantity than is usually found. The ventricles were not distended, nor did they present any unusual appearance. The arachnoid of the spinal cord was inflamed throughout its whole extent. In the region of the third or fourth dorsal vertebra was found a collection of thin pus, measuring about half an ounce. Here the substance of the cord was decidedly softened; above and below it appeared healthy. I have to add that the substance of the brain was congested. P.S.—On the morning of the patient's death, I was temporarily relieved from duty in this hospital, and sent to Madison, Indiana, in charge of some sick who were being transferred to that point. Consequently A. A. Surgeon R. Wirth had the kindness to perform the post-mortem operation, and the description of the lesions found is by him.

CASE II.—REPORTED BY R. WIRTH, A. A. Surg. U.S.A.—Private John L. Smith, of Co. E, 74th Ohio Infantry, was admitted in the afternoon of March 25th, during my temporary absence from the hospital. I saw him about half an hour after admission, and found him *delirious* and unable to give an intelligent account of himself. From the steward I ascertained that he came from the barracks, and was on his way to the front. He had given his age as nineteen years, but could only with difficulty be prevailed on to state his place of residence, name of relations, etc. In fact, his mind was confused when he entered the hospital. In his delirium he pointed to his forehead and temples as the seat of violent pain; the face was flushed and dusky; the eyes injected, and the pupils fixed in a medium

state of contraction; the tongue was covered with a white fur, which changed rapidly to a dry, brown crust; the pulse was rapid, full, but not hard; he breathed rapidly, but on examination of the chest, I found not the slightest evidence of inflammation. There was no vomiting nor pain in any part of the abdomen. His delirium was of a rather humorous character; he was very restless and wanted to get up, but was easily persuaded to keep his bed. In his attempts to get up, he staggered as if under the influence of intoxicating liquor. Ordered: the head to be shaved and cold applied; blood to be extracted from the temples and the nape of the neck by cups. R. Magn. sulph. 3 j.; tart. emet., gr. j.; aquæ Oj; M. To be given at once. R. Tart. emetic. gr. vj.; potass. nitrat. 3 j.; aquæ 3 iv.; M. Tablespoonful to be given every two hours. The cupping had not the slightest effect on his condition; the cold applications to his head seemed to ease him somewhat; at any rate, he did not resist or remove the cloth. During the night there was no appreciable change in his condition; he remained restless and did not sleep. His bowels had moved but once. March 26th, nine o'clock A.M.—His pulse was slightly reduced in frequency (from 130 to 120), and the pain in the head seemed to be less violent. As there was still great heat and dryness of skin, I ordered the medicine and cold applications to be continued, and cold, acid drinks given as often as he desired it. Though the tongue was very dry, he seemed not to suffer from thirst, and he drank water, milk, or lemonade, without apparently noticing the difference. During the night of March 26th to 27th, he was again restless and did not close his eyes. The report of the nurses was that he talked incessantly, and attempted repeatedly to get up. At nine o'clock, March 27th, I found him awake; his eyes looked dull and heavy, and the face somewhat paler; the teeth and lips were covered with black sordes, and the mouth filled with a tenacious mucus; he protruded his tongue at my request with difficulty, and seemed to have lost the control over it; though he talked continually, he could not articulate. The muscles of the neck were rigid and painful to the touch; the head was drawn back, and he cried out from pain when I made an attempt to bend it forward; he could not raise himself in bed, nor would he suffer himself to be raised. The pulse was considerably reduced in volume, but not in frequency; the bowels had not moved since the night before last; he had passed the urine twice in his bed, apparently in large quantities. On examination, I found the bladder almost empty. There were now visible on different parts of his body, but principally about the neck and upper part of the chest, dark-colored, irregular patches or spots of different hue and size. They were not elevated, and had the appearance of extravasated blood under a thick cuticle. Ordered: R. Olei ricini 3 ij.; olei tigllii, gtt. iv.; M. Tablespoonful to be given until the bowels move. Emplastrum cantharidis over the whole scalp. Dry cups to be applied to the back, and afterwards croton oil to be rubbed along the spine. On the morning of the 28th I found the patient only weaker, otherwise not changed. The croton oil had had no effect on his bowels, nor did repeated irritant injections prove more successful. At about nine o'clock A.M. he fell asleep, which was looked upon as a favorable symptom; but it was soon apparent that the sleep partook of the nature of coma. For the first two or three hours it was possible to rouse him sufficiently to take some medicine; after that the coma rapidly deepened, and it became evident that he was dying. The pulse remained rapid until about an hour before death, when it became irregular, intermittent, and lost its frequency. He expired at half-past ten o'clock, P.M. *Post-Mortem examination—sixteen hours after death.*—On opening the cranium, the dura mater presented no evidence of disease. The arachnoid was thickened throughout, and *thick lymph* was collected in the grooves formed by the convolutions of the cerebrum. It appeared in larger quantities on the top than laterally. In the sub-

arachnoid spaces, at the base of the brain, there was an increased quantity of clear fluid. The lateral ventricles were not distended by fluid; but the posterior cornu of the right lateral contained a small quantity of pus or lymph. All the structures at the base of the brain were smeared over with lymph; least, however, on the cerebellum. The substance of the cerebrum was congested throughout, evidenced by the very numerous black spots appearing on cutting it. It was not softened nor otherwise changed. The blood in all the vessels had preserved its fluidity, and did not coagulate for several hours after it was exposed to the air. The arachnoid of the spinal marrow presented throughout its whole length, the same appearance as that of the brain; in other words, the inflammation of this membrane was general. The viscera of the thorax and abdomen were not examined.

CASE III.—REPORTED BY DR. WIRTH.—Wm. S. King, aged forty-six, walked on April 6th from the Nashville Depot to this hospital and applied for admission, stating that he was a citizen of Georgia, that he had been in the Southern army, but had taken the oath of allegiance, and had come to work for the Government. On informing him that he could not be admitted without an order from the Medical Director, he said, that in that case he would have to lie down in the street, as he was too sick to go any further. Seeing that he was very sick I ordered him to be taken to a ward. He went, however, first back to the R. R. Depot, where he had left his blankets, and brought them back without assistance. I state these facts simply to show the rapid course the disease took in this case. Postponing a more minute examination until he was brought to bed, I casually ascertained from him that he had come with the cars from Nashville and was taken sick on the road; that he felt pain in the head, neck, and back, and "in the bones" generally; the eyes were injected, and the face flushed. He had evidently fever, but he was perfectly rational, and walked alone up stairs without difficulty. *Half an hour afterwards I found him delirious*, and could elicit nothing more of his previous history. He seemed to suffer great pain, and moved constantly about in his bed, throwing off the cover, rising up and falling back again. The pulse was rapid but not strong. Though the eyes were congested and the face flushed, there was no appreciable increase of temperature about the head. I now suspected it to be a case of cerebro-spinal meningitis, and looked for the "spots," but discovered none. Ordered five cathartic pills to be given, the back to be cupped along the spine, afterwards friction with croton oil, and sinapisms to the calf of the leg and soles of the feet. Cold cloth to be applied to the head, which was, however, soon discontinued, as it seemed to distress him. During the afternoon he became somewhat quiet, and showed a tendency to sleep; but the pain seemed too severe to permit him to rest. For some minutes he would lie quiet, then suddenly start up as if frightened. He took no nourishment of any kind, and showed even indifference to drinks offered him. During the night his bowels moved, but it produced no change in his condition; strong sinapisms were left for hours on the legs without reddening the skin; he was kept in bed with difficulty. On examining him in the morning, I found on his neck, breast, and legs, dark red spots of irregular form and size; they were better marked and of a deeper hue than those observed lately in two other cases of the kind in this hospital; they were true petechiæ. At seven o'clock the pulse was not perceptible at the wrist, and it remained so until he died. He continued delirious, speaking and moving about incessantly; but all his movements indicated extreme weakness. He could not be induced to swallow anything. About six hours before death his head was drawn back, and could not be bent forward with a reasonable amount of force. At four o'clock P.M. he sank into coma, and died at 6½ o'clock, thirty hours after admission. Unfortunately no post-mortem examination was made in this case, the body having been taken away for interment before it could be examined.

American Medical Times.

SATURDAY, MAY 7, 1864.

MORTALITY IN HOSPITALS.

In the first lines of the preface to her admirable work, "Notes on Hospitals," Miss NIGHTINGALE remarks:—"It may seem a strange principle to enunciate as the very first requirement in an hospital that it should do the sick no harm." It does indeed seem strange that, in this day of the universal recognition of the necessity of hospitals, one of the ablest writers on this subject should lay down as the first principle in their construction that they do the sick no harm. We have been accustomed to regard the hospital as an asylum where every arrangement and appliance necessarily tended to restore the sick to health. To the temples of the ancients flocked the sick, the lame, the blind, as to shrines of health, to be healed of their infirmities. Out of this custom grew the modern hospital. Is it really true that, after centuries of experience, we have so far departed from the original idea in the establishment of hospitals that we need to be admonished of the real object of such institutions? Must we learn anew that hospitals are designed for the cure of the sick? Whoever calmly views this subject in the light of experience, must acknowledge that Miss NIGHTINGALE has stated a truth full of significance and deserving of the most serious consideration. It is too true, as she remarks, "that the actual mortality in hospitals, especially in those of large crowded cities, is very much higher than any calculation founded on the mortality of the same class of diseases amongst patients treated out of hospitals would lead us to expect." This is especially the case with those diseases classified under the general head of typhoid, as erysipelas, pyæmia, continued fevers, etc. Our large metropolitan hospitals always show an excess of deaths from these diseases. But there is a still more significant sense in which hospitals may be allowed to prove harmful to the sick, viz. by exposing them to local causes of diseases, which should never exist in a hospital. It now not unfrequently happens that patients enter general hospitals with simple diseases, but contract other maladies of a more fatal character, of which they die. The aggregate mortality of this class from fever and typhoid diseases in large city hospitals is not inconsiderable. In every lying-in ward or hospital we find striking proofs of the truth of this statement. Every life sacrificed from such causes is needlessly wasted.

The practical direction which we wish to give to these facts is upon those who are interested in the establishment of new hospitals. New York is about to add two large metropolitan hospitals to her existing institutions, viz. the Roosevelt Hospital, and a new Emigrant Hospital on Ward's Island. They are endowed with ample means, and the managers of these enterprises will doubtless spare no pains to render them models of excellence. But if the Boards of Management rightly estimate the value of properly constructed hospitals, they will realize that they have assumed no mean responsibility.

Let us briefly glance at some of the causes of excessive hospital mortality. First, and chiefly, is an insalubrious

location. A permanent general hospital should never be located in thickly settled parts of the town. The death-vapor which overhangs the crowded quarters of a large town affects most disastrously the sick congregated in hospital wards. This fact is strikingly shown in the vast difference of mortality between city and country hospitals. In England the rate of mortality in the country hospitals is considerably less than half that of the London hospitals. Secondly, hospitals should be so constructed as to give a large amount of air-space to each patient, with the rapid and constant renewal of air by night and day. No hospital is a proper residence of the sick which does not afford him a full and constant supply of fresh and pure air. We have not yet reached the ultimatum of hospital ventilation. By the means now employed the air in the centre of a ward is stirred, but we fail to flush the floors and sweep the corners with renewed currents of air. Thirdly, over-crowding is an evil closely allied to deficient ventilation. The statistics of hospitals show an exact correspondence of the rate of mortality with the number of patients in a single building. In a hospital with 100 inmates the chances of recovery from a given severe disease are one-third greater than in a hospital with 300 inmates. We see this fact strikingly illustrated in the difference in mortality between city and village hospitals. The former usually have 300 inmates, the latter rarely more than 25; while the mortality of the former is marked at 100 per cent. the latter is rated at less than 50 per cent. Finally, the admission of contagious and infectious diseases to general hospitals imperils the lives of the inmates. We have on several occasions pointed out the danger of admitting typhus to our large hospitals; it is a far more dangerous disease than small-pox, with our means of protection against the latter; but if small-pox were admitted, no other patients would consent to enter the same building. Still typhus too often finds free entrance to large hospitals, and always leaves its foot-prints. It seems to be a favorite theory with MISS NIGHTINGALE that typhus should be scattered through the wards of general hospitals, and some of the London hospitals follow the practice. The result has been that during the past year deaths from fever are reported in these hospitals among patients suffering from other maladies. Our experience in metropolitan hospitals admitting fever is, that, whether scattered or collected in a single ward, typhus is sure to claim its victims among other patients and attendants. The Governors of the New York Hospital have for several years rigidly excluded fever from its wards, and recently the Commissioners of Charities and Correction have determined upon the *establishment* of a Fever Hospital in connexion with the institutions under their charge.

In the establishment of the new hospital for the city, we trust the facts above stated will have due weight. The Roosevelt Hospital has not been located. The Commissioners of Emigration have an admirable site for the location of their buildings, and it will doubtless be adorned with a structure beautiful in architecture. But its real beauty will be in its interior construction and its adaptation to the recovery of the sick.

SUCCESS OF THE FLOATING HOSPITAL.

Few of the profession are aware of the fact that the Floating Hospital in our harbor is one of the institutions of which we have just occasion to be proud. It owes its

existence and its success to medical men. On the destruction of the quarantine buildings, the Commissioners were at a loss what to do with the sick emigrants. The remedy was suggested by Dr. W. C. ANDERSON, of Staten Island, a gentleman of extensive and accurate knowledge of all that relates to quarantine, and one of the newly appointed quarantine Commission, who strongly recommended a floating hospital. His letter of March 1, 1859, on that subject is an able vindication of the scheme proposed, and led to its adoption. The hospital ship was put in order under the direction of Dr. ELISHA HARRIS, who conducted it during the first year, and established its real value. It has now become, after five years of successful management, a permanent part of quarantine, as will be seen by the following extract from the law of last year:—"The floating hospital shall, from the first day of April to the first day of November, be appropriated exclusively to the care of persons sick with yellow fever; from the first day of November to the first day of April the floating hospital may be used for the care of typhus or ship fever; and until permanent provision shall be otherwise made by law, small-pox patients shall be sent to, and supported as at present at Blackwell's Island; and typhus or ship fever patients shall be sent to, and supported as at present at Ward's Island; and cholera patients shall be provided for by the commissioners of quarantine in such manner as they may determine, and occasion may demand."

MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

The annual meeting of the American Medical Association is now near at hand, and it is desirable that all necessary preparation be perfected as rapidly as possible. It is the duty of the Committee of Arrangements to verify and report upon the credentials of membership, to receive and announce all essays and memoirs voluntarily communicated either by members of the Association or by others through them, and determine the order in which such papers are to be read and considered. To facilitate the business of the Association, it is very important that delegates throughout the entire country immediately forward to the Chairman, Dr. JAMES ANDERSON, No. 30 University Place, their names and the title of the body which they represent. The delegates from the city of New York, Brooklyn, and adjacent towns, are requested to register their names in the records now at the residence of Dr. ANDERSON, when they will receive their tickets of membership. It is also very desirable that the authors of essays, reports, and memoirs report by letter to Dr. ANDERSON the titles of their papers, and the length of time it will require to read them. Preparations are being made to render this meeting one of the most pleasant and profitable ever held. There are abundant evidences that it will be largely attended.

COMMISSIONERS OF QUARANTINE.

WE learn that one of the last acts of the New York Legislature was the appointment of the Commissioners to carry out the provisions of the quarantine law of 1863. The Commissioners are Dr. W. C. ANDERSON, of Richmond Co., Dr. R. THOMPSON, of Kings Co., and Mr. CYRUS CURTIS, of New York. The *Richmond County Gazette* makes the following comments:—"The fifty-fourth section of the bill, as originally passed, provided that the Governor 'shall nominate, and by and with the advice and consent of the Senate appoint three discreet persons, citizens of the State, who shall be residents of the metropolitan police district, who

shall be Commissioners of Quarantine for the purposes of this act,' etc. The bill was not signed until after the adjournment of the Senate, consequently the Commissioners were not appointed, and the act remained a dead letter during the past year. The whole management of quarantine was left to the discretion of the Health Officer, with a supervisory power in the Board of Health of New York under the old health laws. The act had legislated the old commission out. They had done all that they were permitted to do under the previous law of removal. They had provided the floating hospital for the treatment of yellow fever patients. They had removed from this island, and given to small-pox and ship fever patients a new direction altogether. This arrangement was an immense advance over the system that formerly prevailed, and equally consistent with humanity to the unhappy patients brought into our waters, and with good neighborhood and security to all concerned. Having effected these improvements as temporary measures, the old Commissioners could proceed no further without more power than the old law conferred."

Obituary.

JOHN REDMAN COXE, M.D.

DR. COXE was the oldest graduate of the Medical Department of the University of Pennsylvania, in which institution he was for many years a Professor. He was born in Trenton, New Jersey, on the 16th of September, 1773. He was educated in Philadelphia, under the charge of his grandfather, Dr. John Redman, until his tenth year, when he went to England, where he remained at school until his seventeenth year, when he went to Edinburgh to complete his classical education; while there he attended a course of medical lectures at the University. He returned to America in 1790, and at once commenced the regular study of medicine with Dr. Benjamin Rush, with whom he remained until 1794, when he received his diploma. While with Dr. Rush he was actively engaged in practice during the severe visitation of the yellow fever in 1793, at which time three of his five fellow-students died of the fever. Immediately after graduating he went to London, and became a house-pupil at the London Hospital, and remained there nearly a year. He then went to Edinburgh, and attended a course of lectures at the University; thence to Paris, where he pursued his medical studies for three months. He then returned to London, where he spent several months in the hospitals. He returned to the United States, and settled in Philadelphia in the winter of 1796-7, when he at once entered upon the active practice of the profession for which he had been so carefully preparing himself for many years of study.

DR. COXE was appointed, by the Board of Health, physician to the port during the second visitation of the yellow fever, in 1798. He was for several years one of the physicians of the Pennsylvania Hospital, and also of the Philadelphia Dispensary. He was largely engaged in private practice, when, in 1809, he was elected Professor of Chemistry in the University of Pennsylvania, from which chair he was transferred, in 1818, to that of *materia medica* and pharmacy, which he held until 1835. For many years he has been leading the quiet and retired life of a student. Dr. COXE was one of the earliest introducers of vaccination into the United States, and was the first to introduce it into this city. His name has for more than half a century been a household word in connexion with the Hive Syrup (*Syrupus Scille Compositus*, U. S. P.) which he invented, and which has proved such an inestimable blessing to thousands. He has passed away quietly, without

disease, at the advanced age of ninety years and six months, having never been sick in all that time.—*Reporter*.

FRANKLIN BACHE, M.D.

DR. BACHE, one of the most eminent physicians of Philadelphia, died after a brief illness on the 19th April. He was in the seventy-second year of his age, having been born in Philadelphia in 1792. During the greater part of his long and industrious life he was professionally connected with various public institutions of our city. At the age of eighteen he graduated at the University of Pennsylvania as Bachelor of Arts, and four years afterwards received his degree in the medical department of the same institution. After spending a year in the army as surgeon's mate, and two years as full surgeon, he resigned his commission and commenced practice in this city. From 1824 to 1836 he was Physician to the Walnut Street Prison; from 1826 to 1832 a Professor of Chemistry in the Franklin Institute; from 1829 to 1839 Physician to the Eastern Penitentiary; from 1831 to 1841 Professor of Chemistry in the Philadelphia College of Pharmacy; and in 1841 he was appointed a Professor of Chemistry in the Jefferson Medical College. This last-mentioned position he held during the remainder of his life, and performed the duties connected with it in the most active and efficient manner. PROF. BACHE was also formerly President of the American Philosophical Society, and at the time of his death was President of the Deaf and Dumb Asylum. He has written a number of valuable works on medicine and chemistry, of which the United States Dispensary, by Dr. George B. Wood and himself, is the most celebrated. As a member of the Publishing Committee of the United States Pharmacopoeia, he also contributed much of the most valuable matter contained in that work. His labors extended almost to the date of his death, his last illness being quite short. He attended to his duties during the whole of the last session of the Jefferson College, and was even at the party which was given on the evening of the last commencement of that institution, on the 10th of this month. PROFESSOR BACHE was the eldest son of the eldest grandchild of Benjamin Franklin, a brother of Colonel Hartman Bache, of the United States Engineer Corps, and a first cousin of Professor A. D. Bache, Superintendent of the Coast Survey. A daughter and four sons survive him, three of his sons being in the Government service. By the death of PROF. BACHE Philadelphia loses a learned and scientific physician, one who did much towards maintaining her character as a centre of medical knowledge.—*Reporter*.

Army Medical Intelligence.

(CIRCULAR LETTER.)

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., April 23, 1864. }

THE following Order from the War Department is respectfully furnished for your information and guidance.

By order of the Acting Surgeon-General:

C. H. CRANE, *Surgeon, U.S.A.*

WAR DEPARTMENT, ADJUTANT-GENERAL'S OFFICE, }
WASHINGTON, D.C., March 29, 1864.

GENERAL ORDERS, No. 127.

I. Medical Directors of Departments will establish a General Hospital, at some convenient point within their respective Departments, for the reception and treatment of sick and wounded officers, but no expenditures for the construction of new hospitals for this purpose will be incurred without special authority. They will detail a Surgeon-in-Charge, who will make requisitions upon the Medical Purveyor for medicines, hospital stores, furniture, &c., according to the standard Supply Table of the Medical Department, and will hire the nurses, cooks, and laundresses

required. Hospital Stewards assigned to Officers' General Hospitals will be paid on the regular muster and pay rolls.

II. On the recommendation of the Medical Director of the Department, a commissioned medical officer will be detailed to act permanently as Treasurer for each Officers' General Hospital, who shall not be removed without sufficient cause. The Treasurer shall have the custody of the funds of the Hospital, and shall perform such duties in relation to collecting, disbursing, and accounting for the same, and such other duties as may be prescribed by the Surgeon-General.

III. On the last day of each calendar month, and immediately on leaving the Hospital, by return to duty, furlough, or otherwise, each officer shall pay to the Treasurer the sum of one dollar for each and every day he has been in the Hospital, and for which he has not already paid as herein provided. When an officer has employed a special attendant, he shall pay thirty cents a day additional for each day such attendant was subsisted in the Hospital. Company officers of volunteers, while in such Officers' General Hospital, shall be considered as "on detached service without troops," for the purpose of drawing their pay and settling their indebtedness to the Hospital, and may be paid on separate pay accounts, instead of on the muster and pay rolls.

IV. When an officer is not provided with money, and is unable to obtain it, he will give a certificate of indebtedness, in triplicate, to the Treasurer of the Hospital, in such form as shall be prescribed by the Surgeon-General, for the amount due from him to the Hospital. The Treasurer shall immediately forward, for stoppage, two copies of the certificate to the Chief Paymaster of the Pay District in which the Hospital may be located, retaining the remaining copy for his own reference and security. When an officer is discharged from the Hospital to return to a regiment serving beyond the limits of the Pay District in which such Hospital is located, the Treasurer shall forward the certificates of indebtedness which the officer may have given to the proper Chief Paymaster, if known to him, otherwise to the Paymaster-General, for such reference.

V. The Chief Paymaster of the Pay District will immediately cause the certificates of indebtedness to be placed in the hands of the Paymaster of the Hospital (or of the regiment, should the officer have left the Hospital), with instructions to stop the amounts on the first payment of the officers by whom the certificates were given. The Paymaster will take the receipt of each officer for the full amount of his pay account, and transmit the deducted sums to the Treasurer of the Hospital to which they are due, who will endorse receipt therefor upon the duplicate certificates in the Paymaster's hands, or furnish duplicate abstracts of receipts signed by him, and embracing in one receipt the names of all the officers on whose accounts the sums have been remitted. The Paymaster will also forward monthly an abstract of certificates thus paid to the Surgeon-General.

VI. Officers of the Subsistence Department will make separate abstracts of the sales to each Officers' General Hospital during each calendar month, and will report the same to the Commissary General of Subsistence in the manner provided by regulations in relation to sales to officers. Payment for stores thus purchased of the Subsistence Department shall be made by the Treasurer monthly, and in cash, when practicable; but when the Treasurer has not money on hand sufficient to liquidate the entire indebtedness of the Hospital to the Subsistence Department, he shall give to the Commissary accountable for the stores sold a certificate of indebtedness, in duplicate, for the amount remaining unpaid, which certificate shall be a valid claim against the Hospital, and be paid from the first moneys received thereafter by the Treasurer, and until paid shall be considered as a sufficient cash voucher to the Commissary for the amount stated therein. When the Treasurer pays this certificate of indebtedness he shall take the receipt of the Commissary for the amount thus paid

him, and shall report his action in this matter to the Commissary General of Subsistence, stating the date and amount of each certificate thus cancelled, the name of the Commissary receiving the money therefor, etc.

VII. Medical Directors of Armies in the field, when necessary, will establish temporary Hospitals in the rear of such armies, to be governed by the above regulations. Medical Directors of Armies and of Departments and Medical Inspectors will frequently inspect Officers' General Hospitals, and in addition to the usual course of hospital inspection, they will investigate the manner in which the Treasurer performs his duties, and promptly report any neglect on his part to the Surgeon-General.

VIII. No officer whose certificate of indebtedness to a Hospital remains unpaid by him shall receive pay without deducting therefrom the amount of this indebtedness and leaving it in the hands of the Paymaster, who shall give him duplicate receipts therefor, one of which the officer shall immediately forward to the Treasurer of the Hospital for which the stoppage is made. A violation of this paragraph will subject the officer so offending to court-martial for disobedience of orders.

IX. When an officer dies in Hospital, the Treasurer shall immediately ascertain the amount of his indebtedness to the Hospital, and prepare an account thereof in triplicate, which shall be certified to be correct by both the Treasurer and the Surgeon-in-charge. One copy of this account shall be retained by the Treasurer, and the remaining two copies be forwarded to the Second Auditor of the Treasury, in order that, upon the final settlement of the officer's accounts, the amount of his indebtedness may be deducted from any pay due him, and remitted to the Treasurer of the Hospital.

By order of the Secretary of War:

E. D. TOWNSEND,
Assistant Adjutant-General.

CIRCULAR, No. 8.

MEDICAL INSPECTOR-GENERAL'S OFFICE, }
WASHINGTON, D.C., March 1, 1864. }

Medical Inspectors, hereafter ordered from one District to another, will turn over to the succeeding officer, or leave in the office, all records and official papers (or copies of the same) relating to the business of the District or Department.

A neglect of this course has already given rise to some confusion and irregularity.

JNO. M. CUYLER,
Acting Medical Insp.-General, U.S.A.

CIRCULAR, No. 9.

MEDICAL INSPECTOR-GENERAL'S OFFICE, }
WASHINGTON, D.C., April 12, 1864. }

As the season for active operations of the army in the field is rapidly approaching, Medical Inspectors will promptly ascertain whether the troops are well provided with Medical Officers, medical and hospital supplies, transportation, etc., for the sick and wounded, and report the result to this Office, in order that any deficiencies may be brought to the attention of the Surgeon-General in time to have them corrected.

Very respectfully, your obedient servant,

JNO. M. CUYLER,
Acting Medical Inspector-Gen., U.S.A.

ORDERS, CHANGES, &c.

ASSIGNMENTS.

Surgeon Bache on being relieved will report in person without delay to the Commanding General, Department of the Susquehanna, for duty in the City of Philadelphia.

Surgeon Caleb W. Horner, U.S.V., is relieved from duty at Nashville, Tenn., and will report in person to the Surgeon-General at Washington for special duty.

Assistant-Surgeon W. M. Notson, U.S.A., will report in person for duty to Surgeon Basil Norris, U.S.A., Attending Surgeon to Officers of the Regular Army, at Washington, D.C.

Hospital Steward Frederick Schrack, U.S.A., has been assigned to duty with Colored Troops in the Army of the Cumberland

Surgeon A. T. Watson, U.S.V., has been assigned to the charge of Branches C and D, Crittenden General Hospital, Louisville, Ky.

Acting Assistant-Surgeon C. E. Witham, U.S.A., to duty in Branch C, Crittenden General Hospital, Louisville, Ky.

Surgeon J. T. Heard, U.S.V., to duty as Surgeon-in-Chief, Artillery Reserve, Army of the Potomac.

Surgeon A. M. Wilder, U.S.V., to duty as Medical Director, 23d Army Corps.

Surgeon P. A. O'Connell, U.S.V., to duty as Medical Director, 9th Army Corps.

Assistant-Surgeon Andrew H. Smith, U.S.A., as Medical Purveyor, District of Arizona, N. M.

Surgeon George H. Oliver, U.S.V., as Attending Surgeon, Fort Craig, N. M.

Surgeon W. H. Thorn, U.S.V., as Surgeon-in-charge, General Hospital No. 19, Nashville, Tenn.

Surgeon Chas. E. Swasey, U.S.V., as Surgeon-in-charge, General Hospital, Fort Smith, Ark.

Surgeon John W. Foye, U.S.V., as Surgeon-in-Chief, 2d Division, 4th Corps, Army of the Cumberland.

Surgeon S. D. Freeman, U.S.V., as Medical Director, Indian Expedition commanded by General Sully.

Hospital Steward F. Hogarth, U.S.A., to the Indian Expedition to Idaho Territory.

Hospital Steward C. McCarthy, U.S.A., to the Army of the Potomac.

Hospital Steward O. Beek, U.S.A., to the Department of Missouri.

Surgeon C. N. Chamberlain, U.S.V., as Surgeon-in-Chief, 4th Division, 5th Corps, Army of the Potomac.

Surgeon J. H. Currey, U.S.V., as Surgeon-in-Chief, 2d Separate Brigade, 5th Corps, Baltimore, Md.

Surgeon Wm. Hayes, U.S.V., as Surgeon-in-Chief, 1st Division, Forces of West Virginia.

Assistant-Surgeon Frank Reynolds, U.S.V., as Surgeon in-charge, Cavalry Corps Hospital, Army of the Potomac.

Assistant-Surgeon Alfred B. Ilvested, 21st New York Cavalry, to the 1st Division, Forces of West Virginia.

Surgeon A. C. Schwarzwelder, U.S.V., as Surgeon-in-charge, Eruptive Fever Hospital, Louisville, Ky.

Surgeon J. E. McDougal, U.S.V., as Medical Director, 9th Army Corps, New York.

Surgeon F. H. Gross, U.S.V., as Surgeon-in-charge of Hospital at Camp Parole, Annapolis, Md.

Surgeon E. B. Dalton, U.S.V., as Medical Inspector of the Army of the Potomac.

Surgeon S. B. Davis, U.S.V., as Medical Inspector and Superintendent of Hospitals, Department of Kansas.

Surgeon William Grinstead, U.S.V., as Surgeon-in-Chief, 2d Division, 11th Army Corps, Department of the Cumberland.

Surgeon Wm. Threlkeld, U.S.V., to Nashville, Tenn.

Surgeon G. S. Palmer, U.S.V., as Medical Director, 11th Army Corps, Department of the Cumberland.

Surgeon S. E. Fuller, U.S.V., as Attending Surgeon, Sick Refugees at Nashville, Tenn.

Surgeon J. W. Lawton, U.S.V., to the Department of the Ohio.

Surgeon J. H. Phillips, U.S.V., as Surgeon-in-Chief, 2d Division, 14th Army Corps, Department of the Cumberland.

Assistant-Surgeon W. B. Trull, to Louisville, Ky.

Assistant-Surgeon W. O. McDonald, to duty with the 1st and 2d Battalion, 16th U.S.I., 14th Army Corps, Department of the Cumberland.

Hospital Steward E. J. Doe, U.S.A., to Office of the Medical Director, Northern Department, Columbus, Ohio.

Hospital Steward C. Nail, U.S.A., to Fort Wayne, Mich.

Surgeon C. McMillin, U.S.V., to special duty, examining recruits at New York city.

Assistant-Surgeon G. P. Jaquett, U.S.A., to McDougall Barracks, Fort Schuyler, N. Y.

Assistant-Surgeon J. C. Baily, U.S.A., to the General Hospital, Fort Columbus, New York Harbor.

Assistant-Surgeon S. H. Horner, U.S.A., as Medical Purveyor, Department of the Ohio, Knoxville, Tenn.

Assistant-Surgeon Dallas Bache, U.S.A., as Assistant Medical Inspector, Department of the Cumberland, Nashville, Tenn.

Surgeon W. Hayes, U.S.V., as Medical Director, Sullivan's Division, Department of West Virginia.

Surgeon G. H. Hubbard, U.S.V., as Medical Director in the field, Department of Arkansas.

Surgeon A. Majer, U.S.V., to duty in General Hospitals, Beaufort, S. C.

Surgeon S. D. Carpenter, U.S.V., as Medical Director, District of St. Louis, Mo.

Surgeon J. R. Ludlow, U.S.V., as Surgeon-in-Chief, 2d Division, 4th Corps, Army of the Cumberland.

Surgeon S. J. W. Mintzer, U.S.V., to Nashville, Tenn.

Hospital Chaplain W. C. Smith, U.S.A., to General Hospital, Ashland, Ky.

Acting Assistant-Surgeon G. J. Park, U.S.A., to General Hospital, Leavenworth city, Kansas.

Surgeon James W. Foye, U.S.V., as Surgeon-in-Chief, 1st Division, 12th Corps, Army of the Cumberland.

Surgeon W. Threlkeld, U.S.V., as Surgeon-in-charge, General Hospital, Tullahoma, Tenn.

Surgeon H. A. Schlaeflin, U.S.V., to the Marine General Hospital, New Orleans, La.

Surgeon J. B. Morrison, U.S.V., as Surgeon-in-Chief, Ames' Division, Jacksonville, Fla.

Assistant-Surgeon R. McGowan, U.S.V., to the Reserve Artillery, Knoxville, Tenn.

Surgeon John L. Teed, U.S.V., to the Cumberland Hospital, Nashville, Tenn.

Assistant-Surgeon Wm. Carroll, U.S.V., as Surgeon-in-Chief, 2d Brigade, Reserve Artillery, Army of the Potomac.

Hospital Steward C. L. Cumming, U.S.A., to the U. S. Laboratory, Philadelphia, Pa.

Hospital Steward E. Alexander, U.S.A., to the General Hospital, Central Park, New York.

Hospital Steward D. S. Bolsenger, U.S.A., to the 5th Regiment U. S. Colored Troops.

Surgeon F. N. Burke, U.S.V., as Health Officer at Memphis, Tenn.
Hospital Steward Chas. V. Sands, U.S.A., to the 1st Regiment U. S. Colored Troops.

AMENDED ORDERS.

So much of Special Orders No. 116, March 12, 1864, from the War Department, as dismissed Surgeon E. L. Feunham, 10th Missouri Cavalry, is amended so as to read: Surgeon E. L. Feehan.

So much of Special Orders No. 107, of March 5, 1864, from the War Department, as relates to Surgeon John F. Head, U.S.V., is revoked, and Surgeon John F. Head, U.S.A., in addition to his present duties as a member of the Board now in session at Cincinnati, Ohio, for the examination of sick officers, is assigned to duty as member of the Board now in session in that city for the examination of Assistant-Surgeons of Volunteers.

MISCELLANEOUS.

Hospital Steward J. Nabrish, U.S.A., has been ordered before a Board now in session at Washington, D.C., for examination for promotion.

Surgeon G. W. Hogeboom, U.S.V., has arrived at Springfield, Mo., and entered upon his duties as Medical Director, District of South-West Missouri.

Surgeon John O. Bronson, U.S.V., has arrived at Fort Humboldt, Cal., and entered upon his duties as Attending Surgeon at that Post.

There are a large number of vacancies existing in the Corps of Surgeons and Assistant-Surgeons of Volunteers, and in the Colored Regiments the need of Assistant-Surgeons is urgent.

The U. S. General Hospital at Gallipolis, Ohio, is transferred to the Department of West Virginia.

Surgeon J. D. Strawbridge, U.S.V., has been ordered to Camp Copeland, Pa., to examine certain recruits rejected by the mustering officer at that place as unfit for service.

Surgeon B. Benst, U.S.V., is sick at Louisville, Ky.

Assistant-Surgeon H. C. Roberts, U.S.V., has returned from leave of absence, and is sick at Norfolk, Va.

Surgeon W. M. Chambers, U.S.V., has returned from leave, and resumed his duties as Surgeon-in-charge, General Hospital No. 15, Nashville, Tenn.

General Hospital No. 1, at Paducah, Ky., was destroyed by order of Colonel Hicks, commanding, as it afforded shelter to the sharpshooters of the rebel General Forrest's command, in the late attack on that place, whence they killed our gunners in the fort. The patients were all safely removed. General Hospitals Nos. 2, 3, and 4 suffered no damage.

Surgeon R. M. S. Jackson, U.S.V., is in New York city on duty connected with the Department of Ohio.

Surgeon N. P. Rice, U.S.V., is at Division No. 1, General Hospital, Annapolis, Md., sick.

Hospital Steward Mark H. Woodbury, U.S.A., now on duty at Augusta, Me., has been reduced to the ranks, and will be sent under guard to Fort Columbus, N. Y. H., as a general service recruit.

So much of Special Orders No. 93, current series, War Department, as dismissed Hospital Chaplain John A. Spooner, U.S.A., has been revoked, and he has been allowed to resign from February 8, 1864.

The Assistant Surgeon-General at Louisville, Ky., has directed Surgeon Thomas W. Fry, U.S.V., Superintendent of Hospitals at New Albany, Ind., to select a suitable building at the latter place, and fit it up in first-class style for the reception of sick and wounded soldiers of African descent.

Medical News.

At a meeting of the Bellevue Medical Union, composed of the Hospital Staff, held April 25, 1864, the following resolutions were unanimously adopted:—

Whereas, our associate, Dr. George Clinton Dewey, has lost his life by pestilential disease, while performing his professional duty:

Resolved, That we have thus been deprived of a kind friend and fellow-laborer, the profession of one of its ornaments, and science of an earnest and faithful life.

Resolved, That while we deeply sympathize with the family and friends of the deceased, and share their loss, we shall ever remember with pleasure the qualities of his mind and heart which bound him to us.

Resolved, That a copy of these resolutions be sent to the family, and to the AMERICAN MEDICAL TIMES for publication.

S. D. WADSWORTH,
BAYLY DONE,
ROSS, B. BROWNELL.

THE SECOND ANNUAL MEETING of the *Medical Association of the Eastern District of Brooklyn* was held February 18, 1864, when the following officers were by ballot duly elected to serve for the ensuing year:—President, Edwin N. Colt, M.D.; Vice-President, Nelson L. North, M.D.; Secretary, J. Joseph Acheson, M.D.; Treasurer, Edward Malone, M.D. There were also appointed the usual standing committees; and two delegates to the American Medical Association have been elected. The Association has about twenty members, and is in a flourishing condition, holding regular meetings on the third Thursday of each month at their rooms in the Williamsburgh Dispensary building. We are glad to feel that this organization has become a permanent institution, as its necessity has long been felt by the medical men of Williamsburgh and vicinity.

Original Lectures.

LECTURES ON GUNSHOT INJURIES OF THE ABDOMEN.

By FRANK H. HAMILTON, M.D.,

PROF. OF MILITARY SURGERY AND FRACTURES AT BELLEVUE HOSP. MED. COLLEGE, AND LONG ISLAND COLLEGE HOSPITAL; SURGEON TO BELLEVUE HOSPITAL; LATE MEDICAL INSPECTOR, U.S.A.

LECTURE VI.—PART II.

Perforating Gunshot Injuries of the Abdomen, complicated with Wounds of the Viscera.

THE small intestines, owing to their extent and to their central, superficial position, are peculiarly exposed to wounds. The duodenum, however, constitutes an exception to this remark. It is not very infrequent also to find the small intestines wounded several times by the same ball.

The small intestines, with the exception of the duodenum, are almost completely invested with peritoneum, so that all wounds which penetrate their walls completely, open directly into the great peritoneal cavity. Suspended loosely by the mesentery from the posterior wall of the abdomen, they float freely within the limits assigned to them; and when they are wounded, the orifices which have been made in the intestinal tube seldom maintain, for any considerable time, an exact apposition to the orifices in the parietes. This tendency to displacement is increased greatly, immediately upon the receipt of an injury, by an increase of the peristaltic motion of the bowels, that is, by the alternate contraction and relaxation of the circular and longitudinal muscular fibres. The retching and vomiting still further promote the displacement of the wounded surfaces.

There is in fact no peritoneal cavity, properly speaking, when the organs are all in their natural position and in health. Those portions of the peritoneum which invest the intestinal tube are in absolute contact either with themselves, or with that portion which lines the walls of the abdomen. If this contact could be maintained, no effusion of the contents of an intestine, or of any of the other viscera of the abdomen, could take place after the occurrence of a wound; but it will be easily understood how, by the admission of air from without through the track of the wound, the peritoneal surfaces may be separated, and a peritoneal cavity may be actually formed into which the contents of the intestine, impelled by peristaltic action, may be now freely poured.

Perhaps this effusion of the contents of the intestine does not always happen in the precise manner which we have here supposed. Another theory of explanation may be adopted which is equally plausible, and which may apply to a greater or less proportion of these cases.

The intestines contain always a certain amount of gas, upon which their elastic and muscular coats are more or less firmly contracted. Immediately upon the receipt of a wound these tissues contract with additional vigor, and the imprisoned air being displaced along the tube, finds a ready exit through the wound in the intestine, but owing to the loss of parallelism between the wound in the intestine and the wound in the walls of the belly, it is driven outwards laterally, the intestine collapses, and the gas is made to occupy the cavity of the peritoneum. The gas having in this manner once gained admission to this cavity, the fluid and even solid contents of the intestine will not find it difficult to follow.

In other cases it is probable that the fecal matter is displaced and carried forwards by the missile, precisely as any other substance may be which happens to lie in its way.

It is nevertheless important that the surgeon should understand that, in case this effusion has not already occurred, it is most certain to take place, if, in his injudicious zeal to ex-

plore the wound, he opens freely to the external air the cavity of the peritoneum. It is not because the air in itself may irritate or inflame the peritoneal surface that we advise its careful exclusion—indeed I am not fully persuaded that it will do any harm in this respect—but because it opens the way for extravasation of the solid and fluid contents of the viscera.

The large intestines, only partially covered by peritoneum and immovable, when wounded do not expose the patient to such imminent hazard of fecal extravasations and the results are much less often fatal. Indeed it is upon these portions of the intestinal canal that surgeons have not hesitated to carry their incisions, for the purpose of establishing, in certain cases, an artificial anus, and the results have fully established the safety and propriety of the procedure.

In view of the statements now made as to certain anatomical relations and peculiarities of these viscera, we are prepared to consider, in case they have been penetrated by a ball, what methods of treatment are most rational, and how far such methods are sustained by experience and observation.

Confining my remarks for the present to those examples in which the ball has completely perforated the abdominal walls and has escaped externally, of course no exploration of the wound is demanded for the purpose of extracting the missile. If, however, the ball has made its entrance through any portion of the bony parietes of the abdomen, it may have carried with it fragments of bone which it would be exceedingly desirable to remove as speedily as possible.

Balls which have penetrated the abdomen through the dorsal region sometimes carry with them, to a certain depth, portions of the dorsal vertebræ, and especially of their transverse and oblique processes, but it is seldom that these fragments are driven fairly into the abdominal cavity. The numerous strong ligamentous and tendinous attachments which cover so completely nearly all the surfaces of both the bodies of the vertebræ and their processes, render their complete detachment very difficult, if not impossible; while the depth of muscular coverings upon their lateral and anterior surfaces still further protects the internal viscera from the projecting points of the displaced spiculae. There does not exist, therefore, the same necessity for extracting these fragments as in some other cases which I shall mention.

When the track of the wound is through the body of the vertebræ, in most cases the spinal marrow or its immediate coverings have been seriously injured, and surgical interference would prove worse than useless; or the large blood-vessels lying in front have been lacerated, and death occurs as speedily as if the heart itself had been opened.

In a few cases a round ball has been known to pass through the side of the body of one of the vertebræ, leaving a round hole or a lateral furrow, without coming in contact with either the spinal marrow or the blood-vessels. It is not probable that we shall be able to diagnose such a case clearly during the life of a patient; and if we were able to do so, I do not see what benefit could be derived from any surgical operation.

In case, however, one of the transverse processes has been broken and sent inwards, although it is not likely to have penetrated the cavity of the abdomen, it yet may give rise to serious results by the formation of an abscess in the bellies of the psoas muscles, which abscess may eventually make its way along between their fibres towards the groin, or it may empty itself into the loose areolar tissue outside of the peritoneum. These results have occasionally happened, and it is worthy of consideration whether, in such a case, it may not be proper to attempt the removal of the broken process at an early moment. This operation will be rendered the less difficult from the fact that the fragment will probably not be beyond the reach of the forceps, and if it cannot be extracted, it may at least be in some manner replaced, so that its extremity

shall no longer press upon and goad the muscular tissues. The danger of the operation will be the less, also, for the reason that the operator is not so likely here to penetrate the cavity of the peritoneum.

If such an operation should be thought justifiable, the incision ought to be made at a right angle with the axis of the body, across the fibres of the lumbar muscles, and directly upon the transverse process, avoiding as much as possible the space between the adjacent processes, in which situation are found the principal muscular branches of the lumbar arteries.

It is much more common to meet with examples of gunshot wounds penetrating the cavity of the abdomen which have entered through the *alæ* of the pelvis, in which cases the ball seldom fails to carry with it fragments of bone.

In most examples the openings made by smooth round balls, and even by conical balls through the *alæ* of the pelvis, are simple perforations, and are not accompanied with much comminution or fracture of the bone beyond the margins of the opening; but numerous small fragments displaced at the point of perforation, and a few larger fragments split off from the inner surface of the bone, are usually found driven inwards. This is especially the case when the missile strikes upon the crest of the ilium.

In all these cases, even though the projectile may not have penetrated the viscera, the cure is apt to be delayed by extensive and prolonged suppuration, the numerous small fragments being with difficulty discharged through the wound of entrance, but making their way easily downwards into the loose areolar tissue of the pelvic cavity.

If the ball has penetrated either of the *alæ* where they are thickly covered by the great gluteal muscles, it would be difficult to discover or to remove the fragments. The great depth of the muscular coverings, and the size and number of bloodvessels with which they are supplied, render all surgical interference improper. But in case the perforation occurs near the upper margin of the pelvic bones, there can be no impropriety in instituting a search for any foreign substances which may be supposed to have lodged within. If the edge of the crest only is broken off, the finger can be easily and safely carried along the track of the wound to a certain extent, and the probe may be introduced pretty freely without much danger of its doing harm. Indeed it is my opinion that, in case the perforation was very near the crest of the ilium, constituting only a smooth, round hole through which the loose fragments could be distinctly felt, but which was insufficient for their extraction, it would be proper to apply the trephine, so as to enlarge the opening. Certainly there is no more important indication than to remove the fragments, and I do not see why the surgeon, under these circumstances, need hesitate to perform so trivial and safe an operation at once. For this purpose a large trephine should be employed, and in order to avoid the necessity of dissecting up the muscles extensively for the purpose of finding a sound piece of bone upon which to rest the pin of his trephine, he might adopt the excellent suggestion of Mr. Guthrie in certain cases of fracture of the skull—namely, to support the crown of the instrument in a circular opening made in a bar of iron, the two ends of the bar being held and steadied by assistants; or perhaps it would answer equally well to employ for this purpose a piece of wood, the opening in which may have been previously made by the trephine itself.

With the exceptions which I have now stated, to which may possibly be added a few examples in which fragments of ribs have been slightly driven in, it will be improper to make anything but the most superficial exploration of the wound, either with the finger or the probe. In short, it is necessary to declare positively that, whenever the missile has penetrated or perforated fairly the cavity of the abdomen, except in certain cases where the ball has penetrated the liver without impinging upon any portion of its bony

parietes, all such deep explorations, for whatever purpose instituted, are positively mischievous, or at all events eminently hazardous.

I am not aware that any late surgical writer or teacher, except Legouest, has called in question the soundness of this maxim. This surgeon, in his treatise on Army Surgery, published at Paris so late as 1863, recommends digital explorations for the purpose of ascertaining whether a ball has penetrated an intestine. While he can find no justification for this procedure in the case of a narrow punctured wound, he proceeds to say:—"But if the wound is made by a cutting instrument, or by shot, we think that it is imprudent to place reliance upon the phenomena previously described; that it is necessary to assure ourselves immediately of the absence or of the presence of an effusion; and if the effusion is found to exist, it is proper to interpose by an operation. The finger ought, therefore, to be introduced into the belly and moved about; if it is withdrawn without being soiled with intestinal matter, we may suppose that the perforation of the intestine is closed by the protrusion of the mucous membrane, by the interposition of the epiploon, etc., and we may confine ourselves to the general means of treatment already indicated. We must not forget, however, that during the first moments after the receipt of the wound, the spontaneous contraction of the intestine opposes an obstacle to the escape of both solid and liquid matter, but that the gas may escape and communicate to the finger an odor easily recognised. In such a case we should keep the external wound open, and compress the walls of the belly, in order to favor the escape of the gas from the abdominal cavity. If, on the other hand, the finger is withdrawn soiled by the matter which has escaped from the digestive tube, we should dilate the external wound by an incision, draw the intestine out, and reunite the solution of continuity by the suture. Plunged into a wound of the abdomen, the finger often encounters the intestinal lesion immediately back of the opening made in the peritoneum, and recognises the ends of the divided intestine by the spasmodic contraction with which they are seized, and which gives to them a hard consistence like cartilage."

The distinguished position which this writer occupies renders it necessary that I should give to these extraordinary statements a careful consideration.

It is unfortunately true that in nine cases out of ten, when a ball has penetrated the abdomen, the patient dies within twenty-four or forty-eight hours; and it is equally true that his death is in a great majority of cases caused by extravasation of the contents of the bowels into the peritoneal cavity, and the consequent inflammation. It is indeed not certain that a conical ball ever traverses the region occupied by the small intestines without both a rupture of the tube and an extravasation of its contents to a greater or less extent.

On the other hand, it is known that a certain number recover after such injuries without any conclusive evidence having been furnished that the intestine was wounded; and that a number still larger recover, with either a permanent, or, as more often happens, with only a temporary discharge of fecal matter through the wound; and these results have happened under what has been termed the general plan of treatment—that is, without surgical interference.

It was the first duty, therefore, of M. Legouest in announcing this novel plan of treatment, to show, by a reference to facts, that his method had obtained more fortunate results. This he has not done. He has failed to report even one example of cure after a gunshot injury by the use of the intestinal suture. And the records of the intestinal suture, as applied to this class of injuries, have always been found to be nearly equally barren of facts; for it must be understood that the suture has before been employed in cases where a protrusion or a complete exposure of the viscera seemed to render the practice proper. It is only in its application to concealed wounds of the intestinal tube,

demanding explorations and incisions in order to bring the wounds into view, that the suggestions of this author appear novel, and seem to demand special attention.

Original Communications.

SYNOPSIS OF

A REPORT UPON CAMP MEASLES,

BASED UPON AN ANALYSIS OF ONE HUNDRED CASES, MADE TO THE SURGEON-GENERAL.

By ROBERTS BARTHOLOW, A.M., M.D.,

ASSISTANT-SURGEON, U.S.A.

It has occurred to me that some special investigations into the clinical history and pathology of CAMP MEASLES might be useful, if the cases traced to a conclusion were permitted to tell their own story. With this view, one hundred cases, as they were admitted into the wards of the General Field Hospital, Chattanooga, were submitted to more or less careful analysis. The clinical observations were compared with the morbid appearances after death. The course of investigation embraced the—

Symptoms referable to the integumentary system,

"	"	"	respiratory system,
"	"	"	circulatory system,
"	"	"	digestive system,
"	"	"	urinary organs,
"	"	"	nervous system,

mode of death, and the examination of the morbid appearances after death. It was proposed, also, to elude a rational method of treatment from these observations at the bedside, and in the dead-house. It is a trite subject, yet every well informed medical man knows that camp measles is a formidable disease, and differs in this respect, if in no other, from the epidemics which usually prevail amongst children, and which most housewives feel competent to treat. The measles of civil life and camp measles may be expected to be alike, when the same conditions are fulfilled in each. The peculiar poison which produces them does not differ. The poison luxuriates amongst recruits and in camps, because the objective and subjective conditions for its development are peculiarly rich in this class of patients.

Camp measles is said to differ from common measles, by the fact of its recurring again and again in the same subject. The 100 cases analysed do not tell this story, for 91 cases had not, and 9 supposed they had had the disease. It is a disease of recruits, especially young recruits. In 100 cases, only 4 were old soldiers, in two of whom, it is probable, the disease occurred a second time; 28 cases in 100 occurred in recruits aged eighteen, and 68 from the ages of seventeen to twenty, inclusive.

Attention was directed to the alleged agency of a fungous growth upon straw in the causation of the disease. The statistics of these cases do not support the theory of Dr. Salisbury; 85 had not, and only 15 had, slept or lain on straw or hay since enlistment. All the cases were exposed to contagion for a period ranging from five to fifteen days. Nothing could be more unwise in respect to sanitary considerations than the present system of collecting and organizing recruits. The error consists in this, that the most thorough and radical change is made instantaneously in the mode of life, diet, and habits of the man. A young recruit goes from his home, where he enjoys substantial food, a comfortable bed, warm clothing, and regular hours, to the dépôt, where he is placed in crowded quarters or tents, badly or not at all policed; his food, of quality to which he is unaccustomed, is imperfectly cooked; he is exposed to the vicissitudes of the weather without adequate clothing and bedding, and is surrounded at all times by animal effluvia. The effects of these agencies are exhibited

in disturbances of the vicarious relation of the skin and kidneys, and of the skin and mucous surfaces, in disturbances of the respiratory organs and in disturbances of the primary assimilation—favorable conditions for the reception of morbid agents, especially of the poison of measles.

FORMATIVE STAGE.—In a period varying from five to fourteen days after exposure to contagion, the first symptoms manifest themselves. A chill followed by catarrhal affection is the earliest symptom. Then the cheeks, eyelids, and alæ of the nose reddened and swell; the nasal passages and fauces tumefy; irritation is felt in the bronchial tubes, and the cough is frequent, dry, harsh, and strident. Abundant secretion from Schneiderian membrane, from conjunctivæ and from bronchial tubes follows this dry stage quickly.

ERUPTIVE STAGE.—The eruption makes its appearance in the majority of cases on the fourth day, upon the face and neck, and spreads thence over the body, appearing last upon inferior extremities. The eruption consists of small red spots, arranged in crescentic patches, rather dark than bright red, slightly elevated, and giving an impression of roughness to the finger passed over the integument. On the face, upper part of chest and anus, the crescentic patches sometimes coalesce, and the redness becomes diffused, variegated, however, with spots or islands of darker hue—the first points of eruption. The tumefaction of the face sensibly increases with the development of the eruption; the eyelids swell, and the conjunctivæ inflame. One section of the Field Hospital being devoted to colored soldiers and contrabands, an opportunity was afforded for the study of the eruption in the negro. The difficulty of making out the eruption in this class of patients depends upon the depth of color. In the pure negro, the eruption appears as yellowish spots slightly elevated, and giving a sensation of roughness; in the mulatto, as a dusky-brown, ill-defined; and in the lighter shades more distinct, reddish-brown spots approaching the characteristics of the eruption in the white. The concomitant symptoms are the same as in the white—coryza, tumefaction of the face and eyelids, conjunctivitis, etc. Negro recruits seem to be as susceptible to the poison of measles as white. The eruption was well marked in 65 cases; not well marked or slight in 35 cases. The mortality was 8 per cent. greater in the latter. Characteristic symptoms occurred in four cases without eruption, two of which died.

DESQUAMATIVE STAGE.—Desquamation occurred in these cases on the third, fourth, or fifth day of the eruption. Not unfrequently large patches of epidermis were thrown off, and the stage of desquamation was always distinctly marked. With the subsidence of the eruption in three cases facial erysipelas supervened. But graver complications occurred at this stage—bronchitis, capillary bronchitis, lobular pneumonia, pneumonia, meningitis, intestinal and renal lesions. These accidents will be further treated of under their appropriate heads.

SYMPTOMS REFERABLE TO THE RESPIRATORY SYSTEM were the most urgent in a large majority of cases. The coryza was distressing in all cases, the mucous membrane of the nasal passages being tumefied, deeply injected, and not unfrequently ulcerated. Laryngeal symptoms were usual, but they did not consist of graver lesions than some hoarseness and aphonia. Cough was dry, loud, resonant, and paroxysmal in an early part of the disease, preventing sleep. Copious expectoration came on early, consisting for the most part of numerous corpuscles, some casts of the finer tubes, and an occasional blood globule. The cough kept up during the progress of the disease, or until the exhaustion of the vital powers precluded the copious exudation into the trachea and bronchial tubes, filling them, and the extensive congestion of the lungs, lobular pneumonia, pneumonia, greatly embarrassed respiration, preventing aeration. In such cases the lips were blue, the face a dusky brown, and the countenance anxious.

CIRCULATORY SYSTEM.—The febrile action in all cases ran high; the pulse quick and rapid, frequently rose to 140 per

minute; the temperature during the preliminary fever and eruptive stage was greatly elevated, but in the stage of desquamation and decline became correspondingly lowered. The action of the heart, though rapid, exhibited little power. The blood when drawn was fluid, of a bright red color, and not readily coagulable. The number of white corpuscles increased very visibly, *pari passu* with the progress of the disease, and the red corpuscles were, in many instances, irregular in outline.

DIGESTIVE SYSTEM.—The mucous membrane of the mouth and fauces was red and punctated; the tongue bright red, and loaded at the sides and posteriorly; filiform papillæ prominent. There were always more or less deep injection of the soft palate, swelling of the tonsils and uvula, and small circular whitish ulcers covered with a soft exudation on the buccal and labial mucous membrane. The swelling of the mucous membrane of the pharynx, involving the orifices of the Eustachian tubes, and the considerable enlargement of the tonsils, were the cause of the deafness experienced in a large number of cases. Deglutition was painful and difficult from these causes and from the sometimes thickened, erect, and inflamed epiglottis; vomiting was rare, but diarrhoea existed in two-thirds of the cases.

URINARY ORGANS.—The earliest symptom referable to these organs was a diminution in the total quantity of urine excreted. In three of those severe cases in which the eruption was either absent or imperfectly developed, in which the respiration was greatly embarrassed from congestion of the lungs, and in which coma and convulsions gave evidence of serious lesion of the brain, there was total suppression of the urine. From the occurrence of the first symptoms to the acme of the disease the quantity of urine constantly diminished, and its specific gravity and morbid deposits increased. The deposits in the main consisted of amorphous lithate of ammonia, numerous crystals of oxalate of lime, mucous and epithelial corpuscles, and a few blood globules. The deposits cleared up in the stage of desquamation if convalescence became established, but in the fatal cases the turbidity increased and the amount of urine diminished. The chlorides disappeared in the cases of bronchitis as well as in those of pneumonia. The return of the chlorides, and an increase in the quantity of urine and a diminution in the amount of sediment, were satisfactory evidences of improvement. Sometimes the increase in the quantity and change in the quality of the urine were so sudden as to fairly entitle these phenomena to the consideration of a critical discharge. Daily examinations were made to detect albumen and casts, but they were not discovered in a single instance.

BRAIN AND NERVOUS SYSTEM.—In three cases there were convulsions and insensibility, terminating in coma and death. Delirium, more or less violent, was present in all fatal cases; so violent in many of them as to require the constant presence of attendants to keep the patients in bed or prevent them doing violence to themselves or others. Typhoid symptoms were developed in the stage of desquamation after the decline of the fever, when intestinal lesions supervened to retard or prevent recovery. Then subsultus, picking of the bed-clothes, low delirium, came on, together with the other signs and symptoms peculiar to the typhoid state. The duration of the disease was from seven to fifteen days. Convalescence was established usually in favorable cases about the ninth day. It was frequently indicated by increased discharges from kidneys or intestines or skin (critical).

Death occurred in two cases before the appearance of the eruption (necremia). During the stages of eruption and desquamation death happened by the brain (meningitis), and by the lungs (bronchitis and pneumonia), later by lesion of innervation, enlargement, thickening, and ulceration of solitary and agminated glands, and a peculiar alteration of the follicles of Lieberkühn, and of the tubular glands of the large intestines. The mortality in the 100 cases analysed was 28, but the average mortality for the hospital was 22.4 per 100. It is interesting to contrast the comparative

mortality in tents and houses. The mortality in 209 cases in General Hospital No. 1, Nashville, was 42. The difference is too small to found a principle upon.

(To be Continued.)

REPORT OF THREE CASES OF CEREBRO-SPINAL MENINGITIS, WITH REMARKS.

By A. P. WOODWARD, M.D.,

OF BRANDON, VT.

SOME weeks ago I published a record made of a post-mortem examination held on a case of cerebro-spinal meningitis or spotted fever. I now propose to report other cases, with a few remarks upon the malady, which I think will be found, after further experience, mainly correct. I make them because I feel it obligatory upon myself to give correct directions to the inferences which may be drawn from that record. Almost any physician who had never come in contact with the disease would be led to infer, from the record of the post-mortem, that the malady was cerebro-spinal meningitis, when in fact the cerebro-spinal meningitis is only one of the many forms which the disease assumes. In other words, the membranes of the brain and cord are only occasionally inflamed; other organs are often, perhaps, not quite as liable to be attacked with inflammation as the membranes of the brain and cord. In the few remarks which accompanied my first article, I mentioned that the disease was a nervous affection; further experience more than confirms that opinion. It has been called typhus, goat, ship, and spotted fever, but I am convinced that it is a nervous affection *sui generis*. I do not think any one has accounted for the disease, or in any satisfactory manner explained the cause of its appearance. Middle-aged and the young, so far as my observation and inquiries have extended, seem most liable to it. Neither habit, occupation, nor previous strength of constitution seems to influence the attack. You will observe that the symptoms vary much in the different cases. The only one that I have observed as in any way common is pain, which may in the onset be located in the front part of the head (a very frequent seat), or in the back of the head, down the spine, in the limbs, and in various regions of the abdomen, which is pretty sure to reach the head before the malady is removed. The pain may precede the attack for many days, or only for a few hours; and in some cases the patient will not complain of pain until somewhat advanced in the disease. Judging from the description which patients have given me of the pain, I should consider it very acute. The duration of the disease is as variable as the symptoms which characterize it, in some instances running on for weeks, before the patient finds himself sufficiently recovered to resume his occupation. In others, the patient, from a condition which appears almost hopeless, will rally in the short space of forty-eight hours sufficient to be able to leave his bed. The spots from which the disease has taken its name are not unlike the spots seen in enteric and typhus fever; often altogether wanting, but when present, presenting in few cases all grades, from the rose-colored rash to the deep and permanent (under pressure) petechiæ, occupying only a limited section, as of the chest or abdomen, or, as in some instances, almost if not quite confluent. From observation and inquiries, I am persuaded that the viscera of the abdomen are occasionally involved, as evidenced during the continuance of the disease by tympanitis and strangury of a very distressing character. Of the viscera of the thorax I believe the lungs and pericardium are the only organs that have been known to become involved. The hypertrophy of the left ventricle, in the case I reported, no doubt existed long before the young man was attacked with spotted fever of the brain and spinal cord. It may be said that they are usually in a state of excitation, which may leave, in fatal cases, marks of previously existing inflammation.

John Eaton, aged 19, American, healthy, complained of headache, and confined himself to light duties about the house for two weeks. On the 3d of March, 1864, took his bed, and soon after became delirious and very restless. March 6th.—I saw him in consultation with Dr. Carpenter, of Fairhaven. At this time the disease resembled delirium tremens, and had the patient been older, I might have called it such. Tongue not much coated; pulse rapid, easily compressed, and of moderate fullness. The pupils were natural; eyes open, and seemed staring at the wall. If loudly spoken to would give his attention for a moment, and perhaps make a remark wholly foreign to the occasion; or he might break out in a musical strain, with an attempt at some favorite air. He would persist in having his arms upon the bed-covering, and with his fingers keep picking the clothing, or reaching and feeling for imaginary objects. Occasionally he would make a powerful effort to get from the bed, which would take two or three attendants to control; and again he would become perfectly subordinate to the entreaties of a female attendant. The surface was bathed in perspiration, which upon his hands was cool, while upon his body and such parts as were kept covered, the temperature was not far from natural. The characteristic rash did not make its appearance during the continuance of the disease, which terminated favorably in two weeks in a protracted convalescence. Treatment consisted principally in the administration of diffusible and cerebral stimulants.

Geo. W. Bacon, French, aged six, not a very rugged boy. March 10th, was noticed to be restless and feverish. On the 11th I was consulted; pulse 144, full, with considerable strength; tongue slightly coated; pupils slightly dilated with suffused conjunctivæ; great thirst and great pain in the head; mind slightly wandering, with hot skin; bowels confined; urine free, and not highly colored. Hydrarg. submur. gr. viij.; Ipecac. gr. ½. To be taken at once. The extremities and body to be made to perspire freely by means of hot brick baths, etc., for two hours; head to be kept cool. Vesper.—Has perspired a good deal; bowels moved twice; other symptoms much the same. James's powder, gr. xx., fiat pulv. iv.: one to be taken every four hours. 12th.—Pulse 148, full and strong; surface burning hot; great thirst; tongue more dry, and brown in the centre; rose-colored rash upon the chest; pain still very severe; more delirium through the night; some tremors observed when he takes hold of a cup. Veratrum viride fluid extr.; min. ij. to be repeated every third hour. Head to be kept cool, while the body and limbs are again sweated for two hours; afterwards to be wrapped in flannel. Vesper.—Pulse 140; vomited twice to-day. Continue the same treatment. 13th.—Pulse 120; tongue less brown, and thirst less; less pain in the head. Belladonna fluid extr. ℥. 1½ every third hour. Extremities warm and head cool. Vesper.—Pulse 144; tongue more brown; thirst increasing; pain in the head superseded by one of great intensity in the left side; no physical signs of disease of the chest present. Recommended veratrum viride; blister to left side, towards the spine; Tully's powder, gr. iij. every fourth hour. 14th.—Symptoms much the same. Pulse 144. Blister has filled. Continue same treatment. Body and limbs to be again sweated for two hours. 15th.—Pulse 120. Pain in the side much relieved. Continue the same treatment. Vesper.—Marked improvement. 16th.—Pulse 90. Pain entirely gone; rose-colored spots faded; bowels have been composed twenty-four hours. Fluid extr. rhei to open bowels. 20th.—Recovered, and at play with his sisters.

Henry M. Graves, aged 30, American, married. Has had within the year two severe attacks of diphtheria, from which he had apparently recovered. On the fourteenth of March complained but slightly of a dull pain or heaviness in his head; retired at a seasonable hour, and was discovered by his wife in the night in an insensible condition. 17th, P.M.—I met the family physician, Dr. Ross, of Middlebury, in consultation. Pulse 100, not full, easily compressed; pupils moderately dilated; sight was not

materially changed so far as I was able to determine; great restlessness, with frequent efforts to get from the bed. Would pay no attention to conversation addressed to him, nor to the presence of his friends. The entire surface was covered with a confluent rash of all grades, from a minute red spot to petechiæ one-eighth of an inch in diameter, which could not be made to disappear under pressure. There was little more than a natural heat of the surface.

As it was almost impossible to open the patient's mouth, and as xxv. gr. hydrarg. submur. had been administered in the morning, it was deemed advisable to try the effect of heat upon the body and extremities, while the head was to be kept cool until the bowels were freely opened by frequent enemata.

To the great delight of all who were interested, after the bowels moved copiously the patient was restored to consciousness. 18th.—Pulse 80; skin natural; converses freely; is now conscious of suffering intensely in his head and spine for a few hours before sufficiently restored to be able to make his sufferings known. From this time the patient gradually regained his usual vigor, if indeed you can say he has really accomplished so much. For some time it was with great difficulty he could walk, and not at all without great persuasion. April 20.—I have this day seen Mr. G. for the first time since the 18th March; he has not the appearance of firm health, and complains of his back and limbs. I directed counter-irritation to the spine.

In the latter part of February I saw a case, in consultation with Dr. Jones of Benson, which resembled case No. 1, except there was less sweating and the patient paid more attention to surrounding circumstances. The case had been blided early and the spine cupped and blistered. In this case strangury was present. (It may have been caused by the fly-blister.) Inability to lie upon his left side and back was a marked feature in his case. The case terminated fatally about the eighth day.

We learn from the above cases that the disease runs no certain definite course; that, like many other maladies, it may be very harmless to all appearance when about to terminate fatally; that every case stands by itself, and, to be successful in the treatment, the physician must so understand it. Each case is to be judged by itself, which may be influenced by locality, or epidemic, or endemic causes.

Cases may and doubtless will arise where bloodletting will be the only available means with which we can combat it with the best prospect of success. I think when bloodletting is likely to prove serviceable, in order to get the full benefit of the remedy, we should resort to it at an early period in the disease. When the patient is unconscious, unless he gets to the urinal himself, the bladder should by no means be neglected.

SOME PRACTICAL OBSERVATIONS ON SMALL-POX AND VACCINATION,

AT ROCK ISLAND PRISON BARRACKS, ROCK ISLAND, ILL'S.

By R. M. LACKEY, A. A. SURG. U.S.A., M.D.

THERE are few subjects in the medical world that have claimed the attention and study of physicians more than small-pox. Every medical writer for centuries past has treated of it, some devoting themselves exclusively to its study, the most valuable results attending their labors. It is, however, a source of regret that, nearly three-quarters of a century after the achievements of Jenner, small-pox should still prevail, notwithstanding we have daily evidence of the power of vaccination, when properly employed, to arrest the ravages of this loathsome disease. From its earliest recorded history small-pox seems to have prevailed extensively in large armies, the presence of which, in this country during the past three years, I think may be regarded as the exciting cause of its general prevalence, the contagion becoming more powerful by concentration, the predisposing cause being negligence in regard to vaccination, and the large number of persons who are consequently unprotected.

The appearance of the disease here was almost simultaneous with the first arrival of troops for garrison duty, but it did not begin to spread to an alarming extent until a fortnight or more after the arrival of the first lot of prisoners, which was about the 5th of December, 1863. From Jan. 1st, 1864, to about March 1st, it spread rapidly and almost entirely amongst the prisoners; some days as many as forty new cases occurred. As there had been no buildings erected for hospital purposes outside the prison yard, some old dwelling-houses on the island were used as a Pest-Hospital, and men sick with small-pox were crowded into those, where they suffered from exposure and insufficient ventilation until better accommodations were provided. Although there are few who have never been vaccinated, yet the number of bad cases that occur is large; thus out of 558 cases admitted there were but 44 that had never been vaccinated; yet out of this number 166 had confluent small-pox. This may be accounted for by the fact that, of the 514 that had been vaccinated, there were 107 on whom the vaccination had not taken effect, and 59 in whom the matter used was evidently bad, as is shown by the character of the scars; and in 38 cases the variola and vaccine disease occurred simultaneously, making in all 204 that were wholly unprotected. The whole number admitted to small-pox hospitals to this date is 1165; of these 335 have died, or one in 3.17. Of confluent cases the deaths have been about 75 per cent. This would show a heavy mortality but for the condition of these men when attacked. Many of them are almost exhausted by other diseases, and a large number die during the first week of the eruption.

In the treatment of small-pox several plans and remedies have been employed, and pronounced by some to have the power of aborting the disease. The *Sarracenia Purpurea*, so highly recommended by Dr. Morris of Halifax, N. S., and others, has been used here to some extent, but its employment has not been followed by the marvellous effects claimed for it; as soon, however, as another supply can be procured, we propose giving it a further trial, and hope to be able to report more favorably.

It has been asserted by some that vaccination, even after the variolous eruption has appeared, modifies the disease, and this course has been recommended; but observations here have not confirmed the truth of this statement. I have carefully observed thirty-eight cases in which the vaccine disease and small-pox occurred simultaneously, and there was not a case in which the vaccination seemed to be of any benefit; but in some cases the variolous modified the vaccine poison, making the vesicle smaller than usual, and in others the vaccine vesicle became contaminated with the variolous poison, and ran the same course of the small-pox pustules. I see no object, therefore, in vaccinating after the variolous eruption has appeared.

The treatment which seems to be attended with the best results here is, to open the bowels freely at the onset of the disease, and, if there be much nausea, an emetic may be advisable to assist in freely unloading the stomach. Some of the saline laxatives are given to keep the bowels soluble during the course of the disease. For restlessness and wakefulness Dover's Powder in 10 gr. doses at bedtime. After the secondary fever has subsided it is necessary to use all the supporting means at our disposal—quinine, iron, wine, egg-nogg, and nourishing diet. For the throat affection that so frequently occurs from about the sixth to the eighth day, we have been using bromine by inhalation, and with very decidedly beneficial results. Frequently the tongue and throat swell enormously in a few hours, so that the patient can neither speak nor swallow, and suffocation seems imminent. In these cases we have seen the swelling diminish as rapidly as it came from the use of this remedy. An inhaling apparatus may be extemporized by two tubes placed in the cork-stopper of a wide-mouthed bottle. From the fourteenth to the twenty-first day pneumonia is most to be feared, and nearly all the cases in which it occurs prove fatal. Treatment is of but little avail, except to palliate as far as possible the sufferings until death relieves

the victim. Erysipelas is very prevalent; nearly 25 per cent. of the whole number of patients are in the erysipelas ward. For this we find the local and constitutional use of iodine and bromine, with prompt support, the best treatment. Abscesses and sloughing are very common among anæmic subjects. I have seen the scrotum and penis nearly all slough away before death took place. For the abscesses, when they become extensive and the parts gangrenous, we have found the injection of a weak solution of iodine, after the pus is evacuated, very beneficial.

We have made use of a variety of external local applications—mainly for their soothing effects during the stages of maturation and decline. A very excellent soothing application is olive oil and creasote, from ten to twenty drops of the latter to the ounce of oil. The oil softens the surface, and the creasote allays the itching, and, besides, its antiseptic properties are of some value. Another local remedy that we have used with great advantage, especially for the eyes, is glycerine. We usually take equal quantities of glycerine and water, and for the eyes the addition of a few grains of tannin to the ounce is beneficial. Where there are extreme dryness and soreness of the mouth the glycerine mixture is an excellent application, not only in small-pox but in other diseases.

Of the 558 cases of which I have taken notes, those between 15 and 20 bear the disease best; no bad cases occurring in those over 40 years of age recover; and no deaths have occurred in those who have a good vaccine mark.

Vaccination is the great disarmer of this terrible destroyer of human life; and the zeal manifested by some physicians in extending its blessings soon after its discovery is well worthy of imitation. As early as 1803 a voyage round the globe was undertaken for the sole purpose of extending vaccination. An account of it, translated from the *Madrid Gazette* of October 14, 1806, begins as follows: "On Sunday, the 7th of last September, Dr. Francis X. de Balmis, honorary Surgeon of the Royal Chamber, had the honor of kissing the hand of his Majesty on his return from a voyage round the world, undertaken with the sole purpose of carrying to all the Spanish dominions beyond the sea, as well as to those of other nations, the inestimable blessing of vaccination." The greatest care was taken to have good virus, and everything necessary to insure success, as the account further states: "The persons attached to the expedition were several physicians with assistants, and 22 children, who had not had the small-pox, and were destined to preserve the valuable fluid by a successive vaccination from arm to arm on one after another in the course of the voyage."

After diffusing vaccination through Spanish America, and establishing societies for its preservation, the Doctor determined to carry this "consolation of humanity," as he terms it, to Asia. A portion of the expedition was also sent to Peru, and it is said the vaccine disease was communicated to 50,000 persons without one unpleasant result. It is owing to the zeal and energetic labors of such men as Dr. Balmis that we have for a long time been comparatively free from those terrible epidemics of small-pox that were once so common, and which threaten us again unless we carefully use the means to avert such calamities. The great evil is in the use of worthless or impure matter, as the following figures will prove. Of 558 cases of small-pox 131 have been vaccinated once, 155 twice, 95 three times, 133 four times, and only 44 never. Of the 514 vaccinated, 285 have had the vaccine disease once, 103 twice, and 16 three times; 107 never. In 59 of the cases put down as having had the vaccine disease, it is evident that the matter employed was bad, as is shown by the sore or cicatrix on the arm, and from the fact that these men had unmodified small-pox; thus making 166 cases in which vaccination was unsuccessful, either from worthless matter, or from carelessness in performing the operation. The virus furnished the Medical Department of the Army is very often worthless and harmful. Of 264 cases vaccinated only 147 were successful, and in these the failure I am confident was not

owing to the careless or ignorant manner of inserting the virus.

We are accountable for the failures of vaccination, for if good virus is used, and the operation performed by an expert, success will be the rule, and failure the exception. How then is vaccination to be made more effectual? First, it is evident that compulsory laws bearing on the subject must be enacted requiring children to be vaccinated at an early age, and no one should be considered protected unless pronounced so by some one authorized to vaccinate and competent to judge.

We must also devise means for obtaining and preserving genuine vaccine virus. We shall constantly meet with disappointment so long as we depend on that kept for sale in the shops, and by those who make it a business to traffic in the article. Let the medical societies in every city and county appoint as a board a certain number of their members, whose duty it shall be to always keep on hand, at whatever cost or labor, a perfectly reliable article of vaccine matter, from which source alone let physicians draw their supplies. In this way the traffic in this important article, and the impositions so often practised by unprincipled and ignorant persons, will be at an end, and the blessings of vaccination generally enjoyed. Whatever errors or dereliction of duty there may be in regard to this matter in future, I trust there will be none that may be charged upon the medical profession.

Reports of Hospitals.

BELLEVUE HOSPITAL.

PUNCTURED WOUND OF THE THORAX—PNEUMOTHORAX—RECOVERY.

J. B., æt. 23, was stabbed on the night of Feb. 20th, between the vertebral column and the interior angle of the left scapula. He stated that the stab was immediately succeeded by an oppressive dyspnoea and great physical prostration. In this condition he was admitted into the hospital. He was expectorating small quantities of bloody mucus, and his face was pallid and anxious. The percussion note upon the right side was normal, but over the left thorax a highly tympanic resonance was elicited. Auscultation revealed cavernous breathing over the upper portion of the left scapula, with absence of all respiratory sounds over the remaining portion of the left cavity. The external wound was sealed, and the patient placed in the recumbent posture, after which his breathing became easy.

Feb. 23d.—He has continued to expectorate a bloody froth since admission, but has been very free from dyspnoea, and reports himself comfortable. Auscultation reveals distinct metallic tinkles more distinctly in the subclavicular region; there is but little fluid in the thoracic cavity, which throughout the greater portion of its extent yields the same abnormal resonance. Feb. 28th.—Improving; no dyspnoea; no metallic tinkling, and much less of the tympanic resonance. Respiration can now be heard extensively over the posterior aspect of the left side. From this time the condition of the patient steadily improved, until March 12th, when he was discharged entirely well.

This case is interesting on account of the rapidity of the recovery which he made from so grave an accident, there being but three weeks from the date of the injury to that of his discharge. The symptoms indicating a wound of the lung, with a complete collapse of this organ, were so well defined that an error in diagnosis cannot be admitted. This man had none of the usual sequelæ of the accident, such as pleurisy, pneumonia, or empyema, and to this must be attributed his early recovery.

PNEUMONIA.

There are many cases of this affection treated during the year at Bellevue, and consequently the disease is familiar

to us all. Of the diagnosis we do not propose to speak. A few words as to treatment. It is now generally admitted that pneumonia is a disease which tends to debility, and therefore requires analeptic treatment. The older methods of sanguineous depletion with antimonials have been swept away by the advance of medical science, rather than by a change in the type of the disease; indeed, we seldom meet with a case of pneumonia so sthenic as to require or even tolerate a plan of treatment which is essentially depressing. A simple case of pneumonia will get well of itself without any medical assistance whatever, provided the system possess vitality sufficient to carry the patient through the disease; and the chief indication which the physician is called upon to meet, is, to sustain the vital forces when they begin to flag. Antiphlogistics are only admissible as palliatives, or checks to certain symptoms, and exercise no control over the real disease. These are the principles which govern our practice:—For a healthy and temperate man, in whom the disease is confined to one lobe, and the pleuritic pain inconsiderable, we frequently do nothing further than keep him comfortable in bed, with diet nutritious and easy of digestion, sufficient to meet the demands of the appetite. Such a man has within himself the elements of recovery. Should this patient suffer from active febrile symptoms, with acute pain during the first stage, dry cups to the chest, and a moderate diaphoresis by means of an oiled muslin jacket and a Dover's powder, will relieve the symptoms. If the pneumonia be more extensive, we expect a greater degree of subsequent asthenia, and modify the treatment accordingly; as soon, therefore, as any active symptoms have been allayed as above, we begin with the more liberal use of food, as strong beef-tea, eggs, etc., reserving tonics and stimulants for the flagging pulse. Dr. Loomis, however, gives quinine from the commencement of consolidation, with a view to support the nervous system till convalescence is established, and thinks the patient under this treatment recovers more rapidly. Pneumonia in old persons and in children, or in persons debilitated from any cause whatever, is very apt to assume the asthenic type, and requires, besides the above, for its successful issue, the administration of stimulants, graduated to the symptoms in the case; for instance, a boy aged twelve years was very ill last winter with a pneumonia confined to the lower lobe of the right lung; his pulse had risen to 120, and was very weak; for several days he took with marked benefit sixteen ounces of whiskey per diem, with eggs, beef-tea, milk, etc., and finally recovered. Most of our patients, sick of pneumonia, get more or less of whiskey during their illness, and all are allowed extra diet. The oiled muslin jacket is used in nearly every case, the practice being to put it over a flannel shirt, and the two keep the skin in a continual moisture. We do not expect to lose any patients with a simple pneumonia, unless it be confirmed drunkards; and it is astonishing to observe how this class of patients succumb to this disease. They demand stimulants *ad libitum*. We have examined the urine for chlorides in many cases, and do not find them absent nor diminished near so frequently as some would have us suppose.

BURNS AND SCALDS.

Under this head is included a class of accidents, ranging from the most trivial to the most grave and dangerous, with which the surgeon is called to deal. We are constantly receiving patients suffering from every variety of burns and scalds, many of whom die soon after admission from the collapse occasioned by either the extent or severity of the injury, the former being the most frequent cause of early death.

The treatment of those cases in which the skin is simply reddened consists in the application of a rag wet with cold water, which is sometimes conducive to the comfort of the patient, but perhaps is oftener a placebo, as in these cases the pain is slight, and it matters but little what remedies

are employed, provided they do no harm. In those cases where the derma is burned to a greater or less depth, the pain and general symptoms are proportionally aggravated. If the injury is very extensive the patient will be in a state of collapse, requiring diffusible stimulants and artificial warmth; if less extensive, the pain, which is often of the most exquisite character, demands the immediate exhibition of opiates, and in both cases the surface of the burn should be protected as soon as possible from the atmosphere and other external sources of irritation. This we effectually accomplish by the following mixture, which is used for nearly every burn in this hospital, as well as by our neighbors at the New York Hospital:—R. Gum, arabic. 3j.; gum, tragacanth., syr. fusc., aa 3ij.; aquæ bullientis Oj.; M. When cool apply a thin coating. Experience has taught us to trust to this mixture in preference to any other remedy. This is applied till suppuration is thoroughly established, and the surface studded with granulations, after which the injury is treated as a simple healing ulcer. Simple cerate, spread upon sheet lint or thin muslin, is now a very good dressing. Should the granulations become pale and flabby, the dressing may be changed by combining equal parts of simple cerate and balsam Peru, which makes a moderately stimulating and pleasant application. These cloths are changed once or twice daily, according to the profuseness of the discharge; it is better, however, to change them seldom than to be too officious in preserving cleanliness. Of course the propriety of anaesthetics during the suppuration of an extensive burn commends itself to the minds of all.

Dr. Packard, of Philadelphia, has recently published in the *American Journal of Medical Science* his success in immediately alleviating the pain of burns and scalds by the application of fresh lard; while Mr. Skey, of London, thinks the best remedy for the early periods of a burn is a solution of nitrate of silver, grs. x. to xv. to the ounce of water.

Soon after seeing Mr. Skey's report of this plan of treatment, we admitted a patient with an extensive burn upon the thorax and upper extremities. She was in a condition approaching to agony, with pain. As soon as the solution was applied she said, "I feel free from pain," and soon fell into a quiet sleep; this application was continued until the surface began to heal on the edges. We learned, however, not to apply the cotton wool recommended by Mr. Skey, in conjunction with the solution, as it sticks to the surface, and irritates rather than soothes.

BLOODY TUMOR BENEATH THE SCALP.

Mary B—, æt. 29, admitted Feb. 7th, 1864, was found upon the street in a state of intoxication. She had a stone in her hand, with which she had been beating her own head. On admission, a large, fluctuating tumor, covering the whole top of the head, was found, and diagnosed as a large extravasation of blood produced by the rupture of some bloodvessels against which the stone had impinged. She was placed in bed, and measures taken to prevent her from inflicting further violence upon herself. The bowels were kept soluble, and nothing was done locally for the tumor. In two days she had recovered fully from the debauch, and wished to go home with her friends. The swelling had diminished in size somewhat more than one-half, and the contained blood was still uncoagulated. These bloody tumors between the musculo-aponeurotic layer and the pericranium are of rare occurrence, and are apt to be extensively diffused, owing to the loose connexion which obtains between these coverings. The diagnosis is easy, especially when the history of the case can be obtained, as in the present instance. The prognosis depends upon the surgeon.

The invariable rule of treatment among our most intelligent and experienced surgeons is to abjure the knife, leaving the blood to be absorbed, which is usually accomplished in a few days, more or less, according to the amount effused; if any assistance is needed it will be a gentle sti-

mulation of the scalp in order to promote this process. Cases that have been cut into have resulted in a diffused erysipelatous inflammation, gangrene, and sloughing, denuding the skull of its pericranium, and ultimately terminating in the death of the patient. The difference between one of these tumors, before and after being opened, is strictly comparable to that of a simple and compound fracture.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, April 20, 1864.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

DISCUSSION ON SPOTTED FEVER.

DR. W. H. DRAPER concluded the reading of his paper on cerebro-spinal meningitis. His observations of the disease were founded principally upon the large number of cases which have recently occurred at Carbondale, Pa. In the majority of the cases the meninges of the brain and spinal cord were intensely inflamed, while in others the pericardium, pleura, and even the lungs suffered. The discolored patches or spots from which the present epidemic seems to have derived its name, were not always present. Opisthotonos was a pretty constant symptom. The liver and kidneys in some instances were found to be the seat of fatty degeneration. The disease was generally of short duration, and very fatal. He was inclined to the belief that it was infectious. The conclusion of his paper was occupied by arguments to prove the identity of this disease with typhus fever. The paper was a very elaborate and finished one, and we regret that we are unable to publish it in full.

DR. SCRIVEN stated that he had met with a few cases of cerebro-spinal meningitis since the last meeting. The symptoms were in the main similar to those described at the last meeting. He referred to three cases in particular. The first was that of an old man, æt. 71, who was seized at first with rheumatic pains, followed by vomiting. When Dr. S. first saw him he was suffering from spasm of the posterior cervical muscles. The pulse was full and strong. The features seemed relaxed; "his whole face seemed to hang." His mind was inclined to wander, though at times he was able to give some account of himself. He complained of burning pain in the head and down the back. The patient was bled to faintness, and the pulse coming up after he was laid down, he was bled again. The symptoms were all relieved, and the patient at last accounts was doing well. The blood showed a buffy coat, and was cupped after standing.

The second case which Dr. S. referred to was that of a boy, 8 years old, whom he only saw in a state of collapse. Cups were applied to the mastoid process, but little or no blood was drawn; they were also applied to the back of the neck with the same result. At the suggestion of Dr. Sayre, who saw the case, the jugular vein was opened, but it was some three or four minutes before the blood was made to flow, it being necessary to free the orifice of the opened vessel by scraping away the partial coagula which existed there. The symptoms were alleviated, but the child was already too far gone to rally.

The third case was interesting in respect to an abscess which developed itself in the lumbar region, and seemed to extend into the spinal canal.

DR. CLARK did not think that there had been sufficient opportunities to study the disease in and around New York, inasmuch as there had been, to the best of his knowledge, not more than a dozen cases under observation, and out of this number there had been opportunities afforded for but two or three autopsies.

He had met with but one case. This was in the practice of Dr. King, and in the person of a young mechanic. He

was seized on Sunday, three weeks ago, with a feeling of malaise, attended with vomiting and headache. These symptoms continued until evening, when he retired at the usual time. During the night he became delirious, and partially paralysed. Dr. King saw him the following morning, and found him pretty profoundly comatose; the pulse was exceedingly small and rapid, the face livid, and there were noticed blotches upon the neck. At twelve o'clock, the time of the consultation visit, stimulants in the meantime having been given, the pulse was more appreciable, and had increased somewhat in force, but was still very rapid. He was then very restless. He refused to speak, probably on account of an inability to move his jaws, which were firmly contracted. The pupils were neither dilated nor contracted. The respiration was sufficient to aerate his blood fairly, and presented no remarkable feature as to character or frequency. The blotches varied in size; some were so small as to be completely covered by a pin's head, while others could not be covered by the end of the finger. The more recent and smaller ones disappeared on pressure, while the larger ones were ecchymotic in character. The larger ones were dark in their centres, and of a light red along their margins. Their form was exceedingly irregular, no two resembling each other; they were notched and irregular in outline, and either angular or nearly rounded, none having any definite oval form. The eruption appeared on the neck three hours before it did upon the feet. There was then (12 M) no opisthotonos. The patient was doing pretty well at last accounts.

DR. CLARK was inclined to doubt as to whether the right name had been found for the disease; in some cases the brain and spinal cord were involved in the inflammation, and so far the term cerebro-spinal meningitis was correct enough; but in other cases the inflammation was limited to the brain, while in still other cases the brain and cord escaped altogether, and the inflammation had spent its force upon the pericardium, the pleura, and even upon the lungs. That being the case, the disease, in his opinion, was due to a condition of the system in which there is a tendency to inflammation, and that that inflammation might show itself in one part of the body or the other, dependent upon circumstances which we cannot at first appreciate.

He was not able to agree with Dr. Draper as to any identity which existed between this disease and typhus fever. In typhus fever the eruption rarely or never appears before the seventh day from the time the headache and chilly feeling commences; the rate too at which this eruption travels over the body occupies a more considerable space of time; and then again the inflammation of the brain, which sometimes complicates typhus, does not show itself until after the end of the first week, and more generally in the course of the second or third week. The rapidity with which spotted fever runs its course, and the symptoms attending its fatal termination, were very different from those of typhus. As to the fatty degeneration of the liver and kidneys, it was most allied to yellow fever; though the investigations of Dr. Thomas have lately tended to show that this same condition of things may be met with in typhus fever. Why might not this lesion exist in spotted fever independent of any analogy that might exist between it and typhus? Taking everything into consideration, he was inclined to look upon the two diseases as entirely distinct.

DR. GRISCOM related a case that had come under his observation in New York Hospital, and which was still under treatment. The patient, after general malaise, was first attacked with severe pain in the head, and when Dr. G. saw him he was suffering from the symptoms of cerebral inflammation. His pupils were contracted but were dilatable. His face was the seat of a most intense congestion; cups were applied, followed by venesection, when almost all the urgent symptoms were alleviated. The following day the patient suffered from an attack of cataplexy, which lasted for twelve hours. He had no command over his sphincter, and, having an attack of diarrhoea, discharged the contents

of his bowels in his bed and over the floor. There was no opisthotonos present. For some time he had been delirious, would spit at every one with a seeming maliciousness, while at odd times he would exercise a musical talent, which he seemed to possess, by whistling vociferously. Taking the symptoms collectively, Dr. G. was disposed to think at the time of reporting the case, that the patient was suffering from an attack of acute mania.

DR. LA ROCHE, of Philadelphia, made some remarks concerning the general characters of the disease as he had met with it around Philadelphia, which corroborated the views of Dr. Clark.

DR. HORSEFIELD referred to a case that occurred in Jersey City, which proved fatal. The tonic and stimulant treatment was resorted to.

DR. DRAPER instanced some examples of the contagiousness of the disease, which tended to corroborate the statements concerning that point referred to in his paper.

The Academy then adjourned.

American Medical Times.

SATURDAY, MAY 14, 1864.

DISCUSSION ON SPOTTED FEVER.

THE meetings of the New York Academy of Medicine have of late, chiefly through the exertions of its President, been unusually interesting and instructive. Many of the most prominent physicians in the city have been enlisted either in the preparation of papers to be read before the Society or in the discussion of topics already presented to it; and the largely increased attendance of members shows that the privileges which they enjoy are not unappreciated. Of the subjects at present before the Academy, the one which has excited most interest is the disease known as cerebro-spinal meningitis, or, as it now appears more correctly designated, spotted fever.

This subject was presented in a well prepared paper from the pen of Dr. Wm. H. Draper, containing not only the observations of various physicians who have witnessed epidemics of the disease, but also his own, in a recent epidemic at Carbondale, Pennsylvania. The discussions which have followed this paper have been useful, and in the main creditable to the Academy. But every reflecting listener must have noticed with regret that they have afforded additional proof of the difficulties which surround the investigation of a disease obscure in its causes and nature, and alarming in its results. How many absurd theories have been broached in reference to the causes and nature of cholera? How many spurious cases of cholera and hydrophobia have been reported relieved by remedies which have no appreciable effect upon the genuine disease? And it is evident that there is equal liability to similar errors in the investigation of spotted fever.

This is a disease about which the majority of New York physicians have no personal knowledge. Their ideas of it have been derived chiefly from hearsay and the books. For several years past occasional epidemics of spotted fever have occurred in various localities throughout the country, but on account of their distance they have excited but little attention on the part of physicians here. But of late a fatal epidemic of this affection has occurred almost

in our immediate vicinity; and from the fact, patent to all, that the causes of pestilential diseases abound in crowded tenement houses and filthy streets, it is believed by many that this city would not escape. Accordingly physicians were on the look-out for cases of Spotted Fever, and it is evident that some of the diseases recently treated here as such on account of a certain resemblance in symptoms, were entirely distinct affections. Here is the danger of which we wish to warn the Academy. When such cases are narrated in the discussions as genuine, presenting perhaps peculiar features, they obviously lead to the formation of erroneous views.

As Spotted Fever is not an epidemic in this city, cases of it, so far as they occur, are of course sporadic, and there is no pathognomonic symptom, no peculiarity of lesion to distinguish the disease from those occasional cases of ordinary meningitis which occur in the practice of any physician. The intense pain in the body and limbs, the headache, the rigidity of the posterior cervical muscles, the loss of the senses, the vomiting, the delirium and coma, and the inflammatory exudation occur in the one disease as well as the other. The only distinctive feature appears to be the presence of spots upon the surface, and the occurrence of these is somewhat uncertain. How great, then, is the danger of mistaking the local for the constitutional affection; and there can scarcely be a doubt that this mistake was made in one of the first cases narrated to the Academy, the symptoms and the lesions of meningeal inflammation being present, but no spots? And if there is liability to incorrect diagnosis, even with the aid of a post-mortem examination, how much greater the danger when the knowledge of the case is derived entirely from the signs and symptoms. It must have astonished the pathologists in the Academy to hear narrated as probable cases of spotted fever, on account merely of resemblance in some of the symptoms, severe attacks of sickness in a western township, induced by swallowing some of the metallic salts, the object of the narrator being to show that unwholesome ingesta may be a cause of the disease; or to hear, as a probable case, the history of an obscure and protracted nervous disorder presenting unusual symptoms and terminating favorably. If such cases be accepted as genuine by any considerable portion of the Academy, it is easy to see that mischief, no less than benefit, is likely to grow out of these discussions. We submit that in so important a discussion as the one being now held before the Academy, no case should be narrated as one of spotted fever unless it occur in an epidemic of that disease, or, if it occur sporadically, unless it present such features as would exclude the possibility of its being any other disease.

We have thought it our duty to make the above remarks, since the Academy exerts an influence on the profession not only in this city but throughout the whole country; and those members of the Academy to whom the above remarks are specially applicable, will take our advice kindly, since they have, for the most part, at the meetings of this Society never been reluctant to expose any error which they believed to be prejudicial to the reputation of the Academy or to the interests of the profession.

CONFEDERATE MEDICAL AND SURGICAL JOURNAL.

The London *Lancet* states that it has received the first number of what it believes is the first medical periodical publish-

ed in the South, having the above title. "It is meant not only as the organ of the Southern medical profession, but as a means of imparting information to those who have been debarred from any intercourse with the scientific world." The contents are:—A paper on traumatic tetanus, by PROF. J. JONES; another on resections of the hip; and a third on the external application of oil of turpentine as a substitute for quinine in intermittent fever; the remainder is of local interest. The place of publication is not given. We cordially unite with the *Lancet* in expressions of sympathy for "our medical brethren in the South," and trust the time is not distant when they will cease to walk in the ways of transgression.

Army and Navy Intelligence.

PAY ACCOUNTS AND CONTRACTS OF ACT. ASST.-SURGEONS.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., March 26, 1864.

CIRCULAR LETTER.—The attention of Medical Directors is specially requested to the following points relative to the Contracts and Pay Accounts of Acting Assistant-Surgeons; errors and confusion having arisen on these subjects:

I. Contracts with private physicians should be executed in triplicate; one copy to be retained by the physician, one kept on file in the office of his Medical Director, and the third immediately forwarded (approved) to the Surgeon-General, with usual post-office address of the person contracted with.

II. Officers terminating these contracts should immediately notify this Office of the date and cause of such action, and date of the contract. All notices and orders relative to Acting Assistant-Surgeons should give their names in full. Upon the termination of his contract, an Acting Assistant-Surgeon should turn over to his successor, or to a Medical Purveyor, all medical and hospital property for which he is responsible, and transmit returns and vouchers at once to this Office. His accounts will be suspended until this is done.

III. Accounts for medical services under contract must exhibit the following facts:

1. The place of service.
2. The dates between which the services were rendered. The Treasury Department assumes every month to be composed of thirty days, and accounts for fractional parts of two successive months must be so calculated; thus, from the 21st of August to the 10th of September, the calculation of time will be from the 21st to the 30th of August, inclusive (ignoring the 31st), ten days, and from the 1st to the 10th of September, inclusive, ten days—making the time to be paid for, twenty days.
3. The name of the hospital, camp, post, regiment, or command, in or with which the services were rendered.
4. The class of persons with whom rendered; whether U. S. forces, colored troops, prisoners of war, military prisoners, refugees, contrabands, or whether the services were rendered in small-pox hospitals.
5. The date of the contract under which the services were rendered, and the name of the officer with whom the contract was made.
6. If for service at a post, or with a detachment, the strength of the command must be stated.

IV. Accounts must be made out for periods of one or more complete months, commencing with the date of entry upon service. No account embracing fractional periods of a month will receive attention, unless it appears upon the face thereof, either that the station of the physician has been changed or his contract annulled; but accounts for any length of time may be presented on one set of duplicates, subject only to the exceptions specified.

V. Accounts for several months' service, if rendered separately, must be continuous; for the Treasury Department will not pay an account for one month until that of the preceding month has been settled.

VI. Officers certifying to accounts of a "Private Physician under Contract," must give their official title, and state explicitly the capacity in which they are serving; otherwise their authority to make such a certificate may be questioned: e. g., A. B., Surgeon U.S.A., *in charge* — *General Hospital*. C. D., Surg. Vols., *Medical Director, 1st Division, 2d Army Corps*. E. F., Col. 40th Ohio Vols., *Commanding Post, Garrison, Regiment*. As they are also held personally responsible for the truth of every statement contained therein, certificates signed "By Order" or "For Medical Director" will be disregarded.

VII. When medicines have been supplied at a per centage of the

amount of compensation, a statement to the effect that they have been furnished as required, must be added to the usual certificate of service, or the claim for medicines cannot be approved.

VIII. All accounts certified by other officers than a Medical Director must be forwarded to this Office through that of the Medical Director of the Department in which the services were rendered, that he may endorse his knowledge of their correctness.

IX. In all cases of absence from duty, the dates and cause of such absence must be clearly stated. If a substitute has been furnished, his name in full must be given, with a statement showing that he has satisfactorily performed all the duties incumbent upon the Contract Physicians.

X. When instruments are furnished to a Contract Physician by a Medical Purveyor, the kind, and cost price thereof, are to be reported by the Medical Purveyor to this Office. The cost price is then deducted from the first account for services rendered subsequent to such reports. The instruments then become the *private* property of the Contract Physician, and are in no case to be turned back to a Purveyor or other officer without the written order of this Office.

XI. Officers requiring medical attendance for their commands should, when practicable, apply to the nearest Medical Director, who will, if satisfied of its necessity, at once supply the required aid, or authorize such action as the interests of the service may demand. When the necessity for immediate medical attendance is great, and the service would suffer by delay, the officer in command will employ a private physician, by contract or otherwise, as provided in Revised Regulations, and he will notify the Medical Director of the Department of the facts, sending him two copies of the contract for approval.

By order of the Acting Surgeon-General.

CIRCULAR LETTER.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., April 27, 1864.

[Copy.]

WAR DEPARTMENT, ADJUTANT-GENERAL'S OFFICE,
WASHINGTON, March 30, 1864.

GENERAL ORDERS, No. 129.—The attention of all officers is called to the Army Regulations and General Orders in regard to correspondence or official matters. All such correspondence must be conducted through the proper official channels, except in cases of pressing necessity, which do not leave time for regular communication, and then the necessity must be stated. All applications or correspondence, through whomsoever made, in violation of this order, will not be responded to, and the writers will be arrested and tried for disobedience of orders, or recommended to the President for dismissal.

By command of Lieutenant-General Grant:

E. D. TOWNSEND,
Assistant Adjutant-General.

The attention of all medical officers of the army is called to the above order from the War Department, and a strict compliance with the same is enjoined.

By order of the Acting Surgeon-General:

C. H. CRANE,
Surgeon, U.S.A.

ORDERS, CHANGES, &c.

APPOINTMENTS.

F. S. Schrack and J. W. Overacre, of New York, F. Goodwin and A. Thomas, of Massachusetts, C. H. Jones and E. E. Kelsey, of Ohio, F. B. Marshall, A. J. Reeves, J. S. McFarland, Alfred Ives and Chas. E. Howe, of the Volunteers, Wm. Fitzgibbon, U.S.A., B. Sellick, of Connecticut, and W. F. Smith, of Ohio, have been appointed Hospital Stewards U.S.A.

Drs. J. Y. Cantwell, J. B. Hood, and H. Z. Gill, of Ohio, W. O. Tracey, of New Hampshire, J. C. Freeman, of New Jersey, J. C. Carter, of Maryland, J. McCurdy, M. C. Woodworth, and S. Kitchin, of Ohio, Fred. Wolf, of New York, A. E. Carothers, of —, J. D. Knight, of Pennsylvania, G. A. Bingle, of New York, A. P. Williams and A. Delaney, Acting Assistant-Surgeons U.S.A., W. S. Woods, of Pennsylvania, J. S. Radcliffe, A. Van Cleef, A. I. Comfort, A. H. Wilson and T. A. McGraw, Acting Assistant-Surgeons U.S.A.; L. D. Sheets, of New York, B. McCluer, of Iowa, J. Collins and H. E. Goodman, of Pennsylvania, and M. W. Townsend, of New York, have been appointed Assistant-Surgeons of Volunteers.

Dr. F. Minot Weld, of Massachusetts, to be Surgeon 27th U.S. Colored Troops.

Dr. J. W. Morgau, of Missouri, to be Assistant-Surgeon 39th U. S. Colored Troops.

Acting Assistant-Surgeon Samuel B. Ward, U.S.A., Surgeon J. Sykes Ely, 126th Ohio Vols., Acting Assistant-Surgeon Herman Loewenthal, U.S.A., and Acting Medical Cadet N. M. Glatfelter, U.S.A., to be Assistant-Surgeons of Volunteers.

Dr. D. D. Taulman, of New York, to be Assistant-Surgeon 26th U. S. Colored Troops.

ASSIGNMENTS.

Hospital Steward William H. Martin, U.S.A., to the 10th U. S. Colored Troops.

Surgeon Henry Jones, U.S.V., to the U. S. Hospital Steamer "State of Maine."

Assistant-Surgeon Thomas B. Hood, U.S.V., to the U. S. Hospital Steamer "Connecticut."

Surgeon J. H. Rauch, U.S.V., as member of Examining Board for Veteran Reserve Corps, at Detroit, Mich.

Surgeon D. G. Brinton, U.S.V., as Surgeon-in-charge, General Hospital, Quincy, Ill.

Hospital Steward J. Hennessey, U.S.A., to Washington, D.C.

Surgeon P. A. O'Connell, U.S.V., as Surgeon-in-Chief, 8d Division, 9th Corps, and as Medical Inspector, 9th Corps.

Assistant-Surgeon W. A. Banks, U.S.V., as Surgeon-in-charge, General Hospital, Parkersburg, Va.

Surgeon T. B. Reed, U.S.V., to the Headquarters Department of West Virginia.

Surgeon Andrew D. Voorhies, 11th West Virginia Vols., to the General Hospital, Parkersburg, Va.

Acting Assistant-Surgeon W. B. Crain, U.S.A., to the Post Hospital New Creek, Va.

Assistant-Surgeon A. M. Sigmund, U.S.V., to Camp Douglas, Chicago, Ill.

Surgeon Thomas H. Bache, U.S.V., to Camp William Penn, Chelton Hills, Philadelphia, Pa.

Surgeon J. S. Kemble, U.S.V., as Medical Director, Defences of Vicksburg and Natchez, Miss.

Surgeon J. W. Lawton, U.S.V., as Surgeon-in-Chief, 2d Division, 23d Corps, Army of the Ohio.

Surgeon A. C. Van Duyn, U.S.V., as Medical Director, District of Southern Kansas, Fort Scott, Kansas.

Hospital Steward Wm. F. Smith, U.S.A., to the 9th Regiment U. S. Colored Troops.

Assistant-Surgeon Alfred Delaney, U.S.V., to the Campbell Hospital, Washington, D.C.

Surgeon Frank Meacham, U.S.V., to the 3d Division, 23d Corps, Army of the Ohio.

Acting Assistant-Surgeon Robert Peter, U.S.A., as Surgeon-in-charge, General Hospital, Lexington, Ky.

Surgeon J. B. Morrison, U.S.V., as Surgeon-in-Chief, Vogdes' Division, 10th Corps.

Surgeon J. G. Hatchitt, U.S.V., as Surgeon-in-Chief, 1st Division, District of Kentucky.

Surgeon W. S. Thompson, U.S.V., as Surgeon-in-Chief, Artillery Brigade, 5th Corps, Army of the Potomac.

Surgeon R. L. Stanford, U.S.V., as Surgeon-in-charge, General Hospital No. 1, Nashville, Tenn.

Assistant-Surgeon A. P. Williams, U.S.V., as Post Surgeon, Depot of Veteran Reserve Corps, Washington, D.C.

Assistant-Surgeon J. C. Carter, U.S.V., as Medical Purveyor, Department of West Virginia.

Surgeon N. S. Barnes, U.S.V., as Surgeon-in-Chief, General Hinks's Division, 18th Army Corps.

Assistant-Surgeon S. J. Radcliffe, U.S.V., to the 2d Brigade, Artillery Reserve, Army of the Potomac.

Assistant-Surgeon L. D. Sheets, U.S.V., to the 2d Brigade, Artillery Reserve, Army of the Potomac.

Surgeon James Collins, U.S.V., to the Division Hospital, Artillery Reserve, Army of the Potomac.

Surgeon M. K. Hogan, U.S.V., to the 1st Division, 9th Army Corps, as Surgeon-in-Chief.

Surgeon Thomas B. Reed, U.S.V., as Assistant Medical Director, Department of West Virginia, Martinsburg, Va.

Surgeon S. J. W. Minter, U.S.V., as Surgeon-in-charge, General Hospital, South street, Philadelphia, Pa.

Surgeon Wm. C. Bennett, U.S.V., as Medical Inspector, 20th Corps, Army of the Cumberland.

LEAVE OF ABSENCE.

Leave of absence has been granted to the following named Medical Officers:—

Assistant-Surgeon W. H. Ensign, for seven days.

Surgeon J. T. Heard, U.S.V., for twenty days from the Army of the Potomac, with permission to visit Washington, D.C.

Surgeon C. H. Laub, U.S.A., permission to visit Washington, D.C.

Surgeon A. T. Augusta, 7th U.S. Colored Troops, for twenty-four hours.

Surgeon Norman Gay, U.S.V., for six days, from the Military Division of the Mississippi.

Surgeon W. C. Bennett, U.S.V., for twenty days, from the Department of the Cumberland.

Surgeon J. G. Hatchitt, U.S.V., for thirty days, from the Department of the Ohio.

Surgeon J. Simpson, U.S.A., Medical Director, Middle Department, and Assistant-Surgeon A. Woodhull, U.S.A., permission to visit Washington, D.C.

Surgeon J. H. Stearns, 22d Massachusetts Vols., for five days.

Assistant-Surgeon Thomas McMillin, U.S.A., sick leave for twenty days.

Surgeon P. A. O'Connell, U.S.V., for seven days.

Assistant-Surgeon A. E. Carothers, U.S.V., for ten days.

Surgeon W. S. Thompson, U.S.V., for two days.

Surgeon B. A. Vanderkift, U.S.V., permission to visit Washington D.C.

Surgeon John McNulty, U.S.V., for sixty days, for the benefit of his health.

Surgeon R. B. McCay, U.S.V., for three days.

Assistant-Surgeon Octave P. Ravenot, 75th Illinois Vols., paroled prisoner of war, for twenty days, at the expiration of which he will report at Camp Chase, Ohio.

Assistant-Surgeon Charles A. Devendorf, 48th New York Vols., a paroled prisoner of war, for twenty days, at the expiration of which he will report at Camp Parole, Annapolis, Md.

Surgeon C. F. H. Campbell, U.S.V., for ten days.

Surgeon D. B. Sturgeon, U.S.V., for sixty days with permission to apply for an extension of twenty days.

ORDERS.

In addition to his present duties Surgeon E. J. Bailly, U.S.A., is detailed for duty as member of the Retiring Board, now in session at Wilmington, Del., to relieve Surgeon Lewis E. Edwards, U.S.A.

Surgeon Edwards on being relieved, to repair at once to Portsmouth Grove, R. I., and resume his former duties in charge of the Lovell General Hospital.

Surgeon W. S. Thompson, U.S.V., is relieved from duty at Elmira, N. Y., and will report to the Commanding General, Army of the Potomac, for assignment to duty.

Assistant-Surgeon Roberts Bartholow, U.S.A., is relieved from duty in the Army of the Cumberland, and will report to the Commanding General, Army of the Ohio, for assignment to duty.

Surgeons W. C. Otterson and R. D. Lynde, U.S.V., are relieved from hospital duty at Nashville, Tenn., and will report to the Commanding General, Army of the Cumberland, for duty in the field. Their places in hospital to be supplied by Medical Officers of the same Army whose health have been impaired by field duty.

Surgeons John L. Teed and Robert Nicolls, U.S.V., are relieved from duty at Nashville, Tenn., and Quincy, Ill., respectively, and will report to Assistant Surgeon-General Wood, U.S.A., at Louisville, Ky., for assignment to duty.

Surgeon A. M. Wilder, U.S.V., will report to the Commanding General, Army of the Ohio, for duty as Medical Director, 25d Army Corps.

Surgeons J. T. Heard and A. L. Cox, U.S.V., are relieved from duty in the Army of the Potomac, and will report to the Commanding General, Army of the Cumberland, for assignment to duty.

Surgeons A. H. Thurston and A. J. Phelps, U.S.V., have been relieved from duty in the Army of the Cumberland, and will report to the Commanding General, Army of the Potomac, for assignment to duty.

Lieutenant-Colonel E. P. Vollum, U.S.A., Medical Inspector, will take station at Helena, Ark., and from thence inspect within the Department of Arkansas.

Surgeon Caleb W. Horner, U.S.V., in addition to his present duties, is detailed as member of the Army Medical Board for the examination of Assistant-Surgeons of Volunteers, now in session at Washington, D.C., to relieve Surgeon M. K. Hogan, U.S.V.

Surgeon Hogan on being relieved to report to the Commanding General, Army of the Potomac, for assignment to duty.

Surgeon J. M. Leete, U.S.V., is relieved from duty at Wilmington, Del., and will report to the Commanding General, Department of West Virginia.

Surgeon George Suekley, U.S.V., is relieved from Hospital Inspecting Board, and will report to the Commanding General, Middle Department, to resume his duties at Baltimore, Md.

The following Medical Officers will report to the Commanding General, Army of the Cumberland, for assignment to duty:—Lieutenant-Colonel E. D. Kittae, Medical Inspector, U.S.A.; Assistant-Surgeons J. C. Freeman, A. J. Comfort, H. E. Goodinan, J. McCurdy, M. C. Woodworth, S. Kitchen, and T. A. McGraw, U.S.V.

Surgeons C. S. Frink, N. F. Marsh, and Henry Eversman, U.S.V., will report by letter to Assistant Surgeon-General Wood, at Louisville, Ky.

Surgeon James Laing, U.S.V., will report to the Commanding General, Army of the Potomac.

Assistant-Surgeon W. S. Woods, U.S.V., will report to the Commanding General, Department of Missouri.

Assistant-Surgeon B. McCluer, U.S.V., will report to Assistant Surgeon-General Wood, U.S.A., at Louisville, Ky., for assignment to duty.

Assistant-Surgeon Edward Curtis, U.S.A., will report to the Surgeon-General of the Army for duty in his Office.

The following Medical Officers will report to the Commanding General, Army of the Potomac, for assignment to duty:—Assistant-Surgeons J. H. Kinsman and Charles Smart, U.S.A.; Assistant-Surgeons J. Y. Cantwell, J. B. Hood, W. O. Tracey, J. Collins, F. Wolf, G. A. Bingel, J. S. Radcliffe, L. D. Sheets, A. Van Cleaf, A. H. Wilson, M. W. Townsend, U.S.V. Assistant-Surgeon A. E. Carothers, U.S.V., will report to the Commanding General, Department of the Gulf, for assignment to duty in Texas.

Assistant-Surgeons A. P. Williams and Alfred Delaney, U.S.V., will report to the Commanding General, Department of Washington, for duty.

Assistant-Surgeons J. D. Knight and J. C. Carter, U.S.V., will report to the Commanding General, Department of West Virginia, for duty.

Assistant-Surgeon Elliott Coues, U.S.A., will report to the Commanding General, Department of New Mexico, for duty.

Assistant-Surgeon H. Z. Gill, U.S.V., will report to the Commanding General, Northern Department, for duty.

Assistant-Surgeon W. F. Buchanan, U.S.A., will report to the Commanding General, Department of the South.

Assistant-Surgeon Webster Lindsly, U.S.A., is relieved from duty in the Department of the South, and will report to the Commanding General, Department of Washington, for duty.

Assistant-Surgeon Samuel B. Ward, U.S.V., will report to Surgeon R. O. Abbott, U.S.A., Medical Director, Department of Washington, for duty.

Assistant-Surgeons J. Sykes Ely and Herman Loewenthal, U.S.V., will report to the Commanding General, Army of the Potomac, for duty.

Assistant-Surgeon N. M. Glatfelter, U.S.V., will report to the Commanding General, 9th Army Corps.

Assistant-Surgeon G. L. Porter, U.S.A., is relieved from duty in the Army of the Potomac, and will relieve Assistant-Surgeon J. Gibson, U.S.A., at the Washington Arsenal.

Assistant-Surgeon Gibson on being relieved, will report to the Commanding General, Army of the Potomac.

Surgeon George E. Cooper, U.S.A., is relieved from duty in the Assistant Surgeon-General's Office, and will report to the Commanding General, Army of the Cumberland, to relieve Surgeon Glover Perin, U.S.A., as Medical Director of that Army.

Surgeon Perin on being relieved will report to Assistant Surgeon-General Wood, U.S.A., at Louisville, Ky., for assignment to duty.

Assistant-Surgeon Samuel Adams, U.S.A., will report to the Commanding General, Army of the Potomac, having been relieved from duty with Surgeon-General Hammond.

Lieutenant-Colonel E. P. Vollum, Medical Inspector, U.S.A., will proceed forthwith up the Red River, and make an inspection of the condition of the wounded in the recent engagements in that section, and the means taken to provide for them.

Lieutenant-Colonel R. H. Coolidge, Medical Inspector, U.S.A., is relieved from duty in the Department of Washington, and will report in person to Assistant Surgeon-General R. C. Wood, U.S.A., for assignment to duty.

Lieutenant-Colonel G. W. Stipp, U.S.A., Medical Inspector, is relieved from duty in the Department of the Gulf, and will report in person to Assistant Surgeon-General R. C. Wood, U.S.A., for assignment to duty in the Department of the North-west.

PROMOTIONS.

Assistant-Surgeons C. S. Frink, G. A. Wheeler, E. Freeman, J. M. Laing, S. Hart, C. J. Kipp, S. S. Schultze, J. K. Rogers, J. M. Leete, N. S. Barnes, N. F. Marsh, H. Eversman, C. B. White, and I. Leavens, of the U. S. Volunteers to be Surgeons.

Surgeon E. D. Kittae, U.S.V., to be Medical Inspector, U.S.A.

RESIGNATIONS.

Assistant-Surgeon E. Freeman, U.S.V., to take effect April 14, 1864.

DISCHARGES, DISMISSALS, ETC.

Assistant-Surgeon P. O'Meara Edsan, 1st Vermont Cavalry, is honorably discharged to enable him to accept a commission in another regiment.

Hospital Steward F. A. Davis, U.S.A., honorably discharged at his own request.

Hospital Steward Alberto Marochetti, U.S.A., honorably discharged to enable him to accept a commission in the Corps d'Afrique.

Assistant-Surgeons David Scott and James Fulton, 143d Pennsylvania Vols., dismissed, they having declined to appear before a Board of Examination.

Assistant-Surgeon Samuel Storer, 99th Ohio Vols., dismissed by direction of the President, for drunkenness, April 12, 1864.

Hospital Steward W. W. Dean, U.S.A., honorably discharged at his own request, April 12, 1864.

Assistant-Surgeon Herman Craft, 143d New York Vols., having tendered his resignation on account of physical disability, is honorably discharged, April 11, 1864.

Hospital Steward Theodore Helmenan, U.S.A., for physical disability, April 11, 1864.

On the recommendation of a Board of Officers, convened at Cincinnati, Ohio, Surgeon Enoch Pearce, U.S.V., is honorably discharged on account of physical disability, to date March 23, 1864.

Assistant-Surgeon Thomas L. Morgan, 10th Missouri Vols., dismissed for habitual drunkenness, gross neglect of duty, and absence without leave.

Assistant-Surgeon T. C. Owen, 110th Ohio Vols., honorably discharged, having tendered his resignation on account of physical disability.

Medical Cadet John E. Beers, U.S.A., honorably discharged, to accept an appointment as Acting Assistant-Surgeon U.S.A.

Medical Cadet Augustus W. Dodge, U.S.A., honorably discharged to accept a commission as Assistant-Surgeon 4th Maryland Vols.

Surgeon A. Weidenbach, 37th Ohio Vols., having failed to appear before a Military Commission as ordered, is dismissed, to date March 8, 1864, for absence without leave.

Assistant-Surgeon Samuel Ingalls, 5th Massachusetts Cavalry, honorably discharged April 20, 1864, having tendered his resignation.

Assistant-Surgeon J. B. Thorpe, 9th Ohio Cavalry, upon the representation of the Governor and Surgeon-General of Ohio, is dishonorably dismissed, April 18, 1864, for habitual drunkenness and neglect of duty.

Hospital Steward John M. McPherson, U.S.A., dishonorably discharged for drunkenness and general bad conduct.

Hospital Steward George A. Smith, U.S.A., dishonorably discharged for forging the signature of his superior officer.

Surgeon O. Munson, 105th New York Vols., honorably discharged for physical disability on the report of a military commission.

Assistant-Surgeon Harlow Gornwell, 2d Massachusetts Cavalry, honorably discharged at the request of the Governor of Massachusetts, to accept an appointment in the 5th Massachusetts Cavalry.

Assistant-Surgeon E. P. Hoover, 95th Ohio Vols., honorably discharged on surgeon's certificate of physical disability.

Surgeon T. E. Mitchell, 1st Maryland Vols., honorably discharged, having tendered his resignation.

Assistant-Surgeon William B. Brinton, 4th Pennsylvania Reserve, honorably discharged at the request of the Governor of Pennsylvania, to accept an appointment in another regiment.

Medical Cadet J. E. Painter, U.S.A., honorably discharged.

Surgeon Finley C. Lattemore, 6th Indiana Vols., discharged on account of absence without leave and for physical disability.

DECLINED APPOINTMENTS.

Dr. Gustavus A. Bingel, of Williamsburg, N. Y., the appointment of Assistant-Surgeon of Volunteers.

Surgeon Morris W. Townsend, 44th New York Vols., the appointment of Assistant-Surgeon of Volunteers.

Dr. A. H. Wilson, Acting Assistant-Surgeon U.S.A., the appointment of Assistant-Surgeon of Volunteers.

Dr. L. F. Russell, Acting Assistant-Surgeon U.S.A., the appointment of Assistant-Surgeon U. S. Colored Troops.

MISCELLANEOUS.

So much of Special Orders No. 101, current series, from the War Department, as mustered out Surgeon Alexander Shaw, 29th Iowa Vols., is revoked, and he is restored and will rejoin his regiment for duty provided the vacancy has not been filled.

So much of Special Orders No. 142, current series, from the War Department, as dismissed Assistant-Surgeon David Scott, 143d Pennsylvania Vols., is revoked, and he is honorably discharged upon tender of resignation.

So much of Special Orders No. 233, series of 1863, as dishonorably mustered out Assistant-Surgeon Washington Burg, 122d Pennsylvania Vols., is revoked upon the recommendation of a military commission, and he is honorably discharged.

The building recently occupied in Washington, D.C., as an Eye and Ear Infirmary, has been reopened as a General Hospital, to be known as the Ricord Hospital. Surgeon Caleb W. Horner, U.S.V., is in charge.

Contract physicians on duty in Small-Pox Hospitals have been placed on the same footing relative to pay as those serving "in the field."

So much of Special Orders No. 132, current series, from the War Department, as dismissed Surgeon H. Tammage, 34th Kentucky Vols., for absence without leave, has been revoked, he having been acquitted of that charge by a military commission.

Surgeon Adolf Majer, U.S.V., is in close arrest at Hilton Head, S. C., for disobedience of orders.

Original Lectures.

CLINICAL LECTURES

ON DIPHTHERIA.

By JOHN T. METCALFE, M.D.,

PROF. PRACTICE OF MEDICINE, UNIVERSITY MEDICAL COLLEGE.

LECTURE I.

I WILL occupy your time this morning, gentlemen, by some remarks on two cases that have lately presented themselves to us, at our Wednesday's clinic.

The first has the following history, which I now read to you from the case-book:—

Margaret Johnson, seven years old, a well developed child for her age, came before the class complaining of loss of power over the vocal organs, and difficulty of deglutition.

Her mother stated that she had been in good health until three months before coming to the college, when she observed Margaret to be troubled in swallowing her food. Not only was the act performed with difficulty and with occasional apparent pain, but the fluid portions of her food would return through the nostrils, when the pharyngeal muscles contracted. Now and then, in vomiting, the food would pass as much through the nose as through the mouth. The child's intellect was apparently in a normal condition. She readily understood everything that was said to her, but lacked the power of intelligible expression.

Soon after the symptoms above noted made their appearance, the patient complained of torpid bowels, of dysuria, and loss of power over the lower extremities. A few days later the arms and hands were likewise affected, and it was observed that the sight became less distinct than usual. There was convergent strabismus of the left eye. Hearing unaffected. Lately she has slept uneasily, and snores heavily and continuously when asleep. At present the partial paralysis above noted exists, but without marked increase. The skin is cool; the pulse quicker than natural; the head drops forward on the chest, and cannot be raised by voluntary effort. On each side of the neck the lymphatic glands, especially about the angle of the jaw, are enlarged. Conformation of mouth and tongue normal; pharynx red, but without membrane. On questioning the mother closely she told us, you remember, that Margaret had been ailing for some days before the symptoms above mentioned had manifested themselves. She had had pain in deglutition, as evinced by the necessity of drawing the head downwards and forwards, and making a sort of grimace as one with a sore throat would do. She had been fretful, restless, weak, and without her usual appetite.

Another case which came before us a few days ago I find thus noticed in Mr. James Moore's notes:—

Timothy Quinlan, æt. 8 years, came to the Clinic for difficulty about the vocal apparatus.

He has never been a robust child, but has never had any serious illness previously. His parents are people of good constitution, without hereditary or other disease. About a month ago, his mother observed him to be troubled with sore throat, but he had no apparent fever nor loss of appetite. Under the angle of the jaws she noticed sensitive lumps, as large as a hickory nut, which lasted until a physician was called in, who gave him medicine. This, his mother thinks, cured the lump and sore throat. His deglutition was painful.

During the time referred to, lasting about a week, the boy was troubled by a harsh, dry cough, with great hoarseness and indistinctness of the voice, so that it was difficult to understand him in ordinary conversation; now he speaks like a person with cleft palate, and, according to his mother, his intelligibility is diminishing from day to day. His throat, on examination, shows great redness of the fauces, with apparent thickening of the mucous membrane,

especially of the right side. There is a pendulous condition of the soft palate, as though the muscles supporting it had lost their tone. There is double converging strabismus. His pulse is natural; skin warm, and slightly moist. Anxious expression of countenance. On attempting to cough, he is unable to make the short, sharp, explosive expiration which should constitute the act. It is more like a harsh blowing sound. His appetite is not bad; bowels regular; urine not examined.

These cases, gentlemen, are interesting, as illustrating some points in the pathology of a disease which has given great anxiety to the medical profession in this country as well as in Great Britain, during the last few years.

Diphtheria is not a new disease, as many have supposed—partly from the new name by which it is now known, and for which it is indebted to Mr. Farre, the Registrar-General of England, and partly because many physicians of large experience have only of late met with it as an epidemic malady. To the excellent monograph of Dr. Edward Headlam Greenhow, and to the admirable lectures of Prof. Alonzo Clark, published in last year's *Medical Times and Gazette*, I refer you for much interesting matter concerning its history.

Most of us who have practised fifteen or twenty years, will easily remember sporadic cases of diphtheria. It is only as an epidemic that it has been comparatively unknown.

I shall, in the first place, speak to you of the peculiar sequelæ, so well illustrated in our two patients—I mean the diphtherial paralysis—and will then endeavor to anticipate answers to such letters as I am constantly receiving from our graduates who have commenced practice, and, having fallen in with the disease under consideration, desire to know what I consider the best general treatment.

"Nerve affections following diphtheria consist chiefly of impaired, perverted, or excessive sensibility, together with a more or less complete paralysis of the muscles of the fauces, pharynx, tongue, lips, extremities, trunk, and neck. The frequency of the occurrence of these symptoms in the several sets of muscles being nearly in accordance with the order in which they have been named, those of the fauces being the most frequent, and those of the neck least so." Doctor Greenhow, from whose article in the August (1863) number of the *Edinburgh Medical and Surgical Journal* I make the foregoing extract, does not mention paralysis of the eye muscles. This is by no means unfrequent. It existed in each of the two cases I have mentioned to you, but is not relatively so common as they might lead you to suppose. Perhaps in order of frequency we might place it after that of the trunk.

The supervention of diphtherial paralysis varies much with regard to the time of its access. In the cases which I have exhibited to you, there has appeared, in one, to be scarcely any appreciable interval between the primary and secondary affections. But this is not the general rule. As we ordinarily see it, the loss of muscular power has come on after apparent convalescence from diphtheria proper. In some instances, patients have been removed from the physician's immediate care to convalesce in some distant place, after which the paralytic symptoms have developed themselves—in one case as long as two months after the first attack.

The practical deduction to be drawn from these facts is to avoid pronouncing your patient cured until several weeks have elapsed after apparent recovery. It is a general rule that the probability and extent of paralysis bear a direct ratio to the intensity with which the antecedent diphtheria has manifested itself; and this latter may serve also to measure the extent to which loss of muscular power will go.

Nevertheless, this is a rule subject to numerous exceptions, as the cases referred to in this lecture will show. Indeed, in one of them it would not have occurred to a physician's mind, before our knowledge of diphtheria was as accurate as it has become of late years, to make any con-

nexion between the slight attack of sore throat and the faucial and other paralysis. In the boy's case, the child was not even obliged to go to bed, and continued to enjoy a good appetite during his apparently trivial indisposition. In some of the worst cases of diphtheria I have ever seen, there was no subsequent paralysis of any sort.

Among the sequelæ most calculated to cause anxiety on the patient's part is an apparent loss of sight. This depends not on any organic affection of the retina, but is a muscular affair—the ciliary muscle being the one involved in paralysis. Patients will occasionally be unable to read the print of an ordinary book, who will yet clearly distinguish objects across a hospital ward. The use of appropriate glasses will often restore the power of vision.

The history of our patients will show you that the paralytic troubles are generally progressive; that is, they may attack any one part of the muscular system, increase in intensity, and subsequently travel, without any seeming rule, to others. Usually gradual in its development, the paralysis may exceptionally be sudden.

It is not always regular in its march. Thus, in one of my late cases I would find the child able to use her arms and legs fairly on one day, on the next there would be much less ability to do so. On the following visit she would have undergone great improvement. So it was with the speech and with deglutition. Later in the disease convalescence became steady and uninterrupted.

In the patients whom you have seen there was no mention made of anæsthesia. This is not an unfrequent phenomenon. We may have it manifested in any part of the body. Usually I have observed it most markedly in the faucial and palatine mucous membrane. It follows the course of the muscular paralysis, and requires no especial consideration.

The same may be said of hyperæsthesia. In the course of convalescence from the paralytic sequelæ, there will now and then be much complaint from excessive tenderness of the affected muscles on pressure being made.

In some cases the patient complains of the skin being so tight as to give the sensation of a swollen member. This is merely a perversion of sensibility, as inspection will show no change in size, nor to the observer's touch will there be anything abnormal.

Among all varieties of diphtherial paralysis, the most interesting and the most dangerous is that in which the heart is the organ concerned. At times the pulse will grow more and more feeble and infrequent, until it finally ceases to be perceptible. In the case of a young lady to whom I was called, in New Jersey, death was due to almost instantaneous cessation of the heart's action. She was apparently in satisfactory convalescence, when on walking across the sitting-room she suddenly dropped down and died. There was no previous organic disease of the heart, nor was there any brain lesion that would explain her abrupt death.

M. VICTOR HUGO, of Hauteville, is in the habit of giving forty "most necessitous" children a dinner once a fortnight. Twenty are dined weekly. The dinner is a sound meal of fresh meat and a small glass of wine. In this procedure M. Hugo is guided by the report of a commission of medical and other scientific men appointed in 1848 by the French Government to consider the causes of such diseases as scrofula, rickets, and impoverishment of blood among the children of the poor. This commission gave it as their opinion that these diseases were caused by the children being almost entire strangers to animal food, and would be entirely prevented by their having a meal of fresh meat once a month. M. Hugo goes beyond the requirements of the report, and gives the needed meal once a fortnight. He has been rewarded by undoubted success—the cure of many and the sensible improvement of nearly all of the fortunate children.—*Lancet*.

Original Communications.

SYNOPSIS OF

A REPORT UPON CAMP MEASLES,

BASED UPON AN ANALYSIS OF ONE HUNDRED CASES, MADE TO THE SURGEON-GENERAL.

By ROBERTS BARTHOLOW, A.M., M.D.,

ASSISTANT-SURGEON, U.S.A.

(Continued from page 231.)

PATHOLOGY.—Autopsies were performed in twenty-two cases, and the morbid appearances recorded by a medical cadet or medical officer, as dictated by me. The brain, thoracic, and abdominal organs were removed from the body; their size, shape, color, weight, and other physical properties carefully noted; abnormal fluids were removed by a syringe and measured; products of diseased action were also, as far as practicable, submitted to microscopic examination. The appearances observed in the brain were usually more or less intense injection and hyperæmia of the brain substance; engorgement of the vessels of the choroid plexus; fluid in the ventricles; in several instances recent lymph upon the surface of both hemispheres; and in one case a large, soft, black coagulum under the dura mater. No graver lesion than slight injection of the vessels was found in the larynx in any of the twenty-two cases examined. Intense redness of the trachea and primary bronchi invariably existed. The mucous membrane of the capillary tubes was of a dusky brown, the epithelial coat softened and easily detached, and the tubes filled with a reddish or yellowish white mucus. The lungs in these cases filled the thoracic cavity, and were of a pink or rose color anteriorly, variegated by spots of dark blue or slate color the size of the lobules. Posteriorly large portions of lung-tissue were found of this deep blue or slate color, the intervening substance being brown, red, or deep rose color. Upon section of the lung in this condition, black blood and bloody serum exuded plentifully, and from the divided extremities of the capillary tubes, yellow pus-like fluid. Considerable portions of this lung-tissue would float in water; but an isolated lobule, corresponding to the blue spots on the exterior surface of the lung, quickly sank in water.

If the patient lived long enough, these patches of deeply engorged lung-tissue went on into red and grey hepatization, the pulmonary pleura taking on morbid action, and pouring forth abundant exudation, glueing it to the costal pleura. The bronchial glands were invariably found enlarged, pulpy, and almost diffuent, of a bluish-grey and ash color. In one case, examined since this report was closed, the bronchial glands, at the bifurcation of the trachea, suppurated largely, and the loose cellular tissue posterior to the œsophagus became the seat of a nabseess extending to the level of the os hyoides.

It resulted from this condition of the lungs that the blood returned from all parts of the body could get no further than the right cavities. These and the pulmonary artery were invariably found distended when examined at this stage, with large, soft, black coagula, whilst the left cavities were empty.

The blood found in the body after death was always thin and black. Examined by the microscope it exhibited an increase in the white corpuscles. In one subject extravasations were observed under integument (purpura). The right cavities in cases dying early, as I have just remarked, were distended to their full capacity and their walls flaccid, whilst the left were firmly contracted and empty. In the more chronic cases—those dying from intestinal lesion—the heart was generally found softened, its muscular walls tearing easily, and the right cavities filled with a yellowish-white fibrinous clot.

The liver and spleen exhibited no characteristic changes. The average weight of the liver in twenty-two cases was

four pounds three and a half ounces, and of the spleen eight and a half ounces.

The kidneys were always found in a state of hyperæmia; the cortical substance dark-brown or lead-color and injected, the pyramids deep purple, and the papillæ deep pink or red, instead of the light rose-color natural to them. Blood exuded plentifully on section of the organs. The average weight was seven ounces, the right being heavier by half an ounce than the left.

The seat of the alterations in the intestinal canal was the glandular apparatus of the ilium; cæcum ascending and transverse colon. In those cases of death early in the disease from brain complication, from capillary bronchitis, and lobular pneumonia, or from congestion of the lung-tissue and paralysis of the heart, due to the distension of the right cavities and deficient blood supply to the left, the intestinal trouble consisted of some redness (port wine color) of the mucous membrane of the ilium—the vessels being arranged in an arborescent manner and symmetrically; distension and elevation of the solitary glands, which appeared white and glistening beneath the epithelial layer; greater distinctness of the follicles of Lieberkühn; and a light yellow or dark grey deposit about the orifices of the tubular glands of the large intestine. Thickening of the agminated patches, softening of the epithelial layer over the solitary and aggregated glands, and injection and hyperæmia of the vessels of the connective tissue beneath the mucous coat, follow. Very characteristic changes occur in this connective tissue; the corpuscles begin an abundant proliferation, granules and minute drops of oil are seen amongst the fibres, and the cells thus developed furnish the material of the exudation seen on the surface.

In the large intestine the deposit which takes place around the orifices of the tubular glands softens, and ulceration is established, which widens eccentrically. The connective tissue corpuscle takes on an action similar to that observed in the small intestine.

SEQUELÆ.—The intestinal lesion may go on into incurable diarrhoea and dysentery after apparent recovery. Chronic pneumonia may result from the condensed patches of pulmonary tissue, and chronic bronchitis may follow the acute. Acute tuberculosis, running rapidly to a fatal issue, is the most common sequela. Aphonia, chronic conjunctivitis, and otitis, are also not infrequent sequences. Latent vices of constitution and tendency, unsuspected, to organic lesions, are suddenly developed during the stage of imperfect convalescence, which often follows an otherwise mild and tractable form of the disease.

TREATMENT.

Prophylaxis is chiefly important. Contagion, it appears, from the story of the one hundred cases, is the sole cause of the disease. Cases may occur propagated by sleeping on straw, but the straw is a fomites. As I have been at some pains to show, the recruit goes from a natural into a purely artificial state. He is exposed to the causes of disease when in a most favorable state for their action. It follows, then, that the recruit should be as gradually accommodated to his new life as possible; he should not be exposed to crowd-poisoning; he should have facilities for bathing and keeping clean, and his food should be well cooked and cleanly served. An essential point is isolation of affected individuals or commands. These are points in hygiene to which attention is necessary if other zymotic diseases are to be prevented, but especially in the prevention of measles.

The rooms or wards in which measles cases are treated should be carefully ventilated, and ample air-space—1800 cubic feet—allowed to each patient; but draughts and currents of air should be excluded. The temperature of the ward or room should not be greater than sixty degrees Fah., and should possess, above all other qualifications, —equality.

It is quite clear that we have no specific, no antidote, for the poison of measles. The one hundred cases analysed exhibit the phenomena of a morbid agent, whose nature is

unknown, entering the human organism, and inducing a series of characteristic changes, irrespective of any drug administered.

We have seen that the three great centres of life are affected more or less in every fatal case. With the light afforded by the results of treatment and the post-mortem observations, what is the duty of the physician? Are the antiphlogistic remedies and regimen to be used under the belief that he has to deal with inflammations of the meninges of the bronchial tubes, or the lungs, or other organs?—or shall he watch the natural method of cure in these cases, and imitate and encourage it? I have seen in many instances the lamentable effects of lowering measures. There is another extreme, equally if not more common—excessive stimulation. The stimulant school of practitioners is increasing. Influenced by the example and teaching of Dr. Todd, but not possessed of his profound physiological, pathological, and therapeutical knowledge, the practice of many physicians consists in the administration of brandy.

Many cases of measles, if left to themselves, terminate favorably by the unassisted efforts of nature. An increase in the excretion of urine, a smart diarrhoea, or a sudden diaphoresis, are the phenomena which mark the crisis and decline of the disease. We may have the opportunity, when the proper time arrives, of producing, imitating, or favoring the occurrence of these critical discharges. Congestions of organs essential to life occurring suddenly, due of course to some serious lesion of the blood not cognizable by our present means of investigation, are the sources of danger. We have seen that coma, convulsions, and delirium are produced by engorgement of the vessels of the brain, by extravasations of blood on the hemispheres, by inflammation of the meninges. In some cases, suppression of urine is coincident with the disturbance of the brain. These symptoms may be much improved by a copious bleeding; but the patients died in every instance in which this remedy was employed. Whiskey, no matter how freely administered, had no greater efficacy. The true way, in my opinion, to treat this condition of the brain is, to excite the action of the kidneys by saline diuretics; to relieve the vessels locally, by cups to the nape of the neck; to produce counter-irritation by hot pediluvia or sinapisms to the extremities, and by saline cathartics; and to remove from the general circulation, temporarily, a portion of the blood by ligatures to the thighs, applied tightly enough to arrest the superficial venous circulation.

The largest mortality is due to pulmonary complications. The description I have given of the morbid anatomy and the photographic illustration of the text, show that a capillary bronchitis, accompanied by copious exudation, lobular pneumonia, an intense congestion of the vessels of the lungs, and a gorged state of the right cavities, are the sources of danger. The left side of the heart is found empty. These pathological facts teach us that stimulants could not be beneficial, and in practice they are found to produce only injury when administered in this state. Here, again, bleeding produces an immediate amelioration in all the symptoms; but the patients die of bleeding. Mercurials and antimonials, used ever so faithfully, do not relieve, but only add complications to the case, and increase the mortality. Here, as in the cerebral complication, we ought to rely upon counter-irritants and cups to thorax, counter-irritants and derivatives to inferior extremities, ligatures to thighs to control the venous circulation, and upon remedies to maintain and increase the renal secretion, and to determine to the surface (minute doses of antimony, citrate of ammonia, acetate of potassa, etc.). The most manageable counter-irritant in these cases is turpentine applied as a stupe, but not permitted to remain long in one place, followed by warm, moist applications (cloths wrung out in warm water). Active diuretics are not indicated, and should be avoided, not only on account of the hyperæmia of the kidneys, but also of the irritable state of the mucous membrane of the intestinal canal. Bitartrate, bicarbonate, and citrate of potassa are the proper remedies

of this class. They should be given in small doses, largely diluted and frequently repeated. If the affection of the kidneys be a prominent symptom, cups and sinapisms should be applied to the lumbar region.

The remedies necessary to control the diarrhoea are saline cathartics with tincture of rhubarb, followed by astringents and opiates. Local remedies are of value. When increased heat of abdominal walls and increase of the number of defections indicate increased hyperæmia of the submucous tissue, and enlargement and thickening of the solitary glands and follicles of Lieberkühn, then dry or wet cups, turpentine stupes, or sinapisms, followed by warm, moist applications, are indicated.

The diet should consist of nutritive matters, which may be taken up in the stomach and duodenum. Animal broths and small doses of wine are proper. These are the main points of the treatment in the formative and eruptive stages of the disease.

During the stage of desquamation, inunctions are useful; olive oil, pure lard, or glycerine may be applied. The capillaries of the integuments are active, and a rapid cell development takes place from the rete mucosum to supply the loss of epidermis. The use of these applications under such circumstances is quite apparent. During this stage, also, carefully prepared nutriment is necessary, and stimulants should be judiciously used. With the decline of the febrile action there is a progressive lowering of the vital powers, the kidneys resume their activity, and diarrhoea frequently supervenes; and these phenomena, although often critical, may still further reduce the patient, and therefore require watching. It is during this stage, also, that unsuspected lesions of various organs commence, and proceed to the destruction of them, without the knowledge of the physician, if he be not awake to the probability of such accidents. Daily examination should be made of the organs likely to become the seats of troublesome sequelæ. The typhoid state which results when the intestinal lesion goes on unchecked, and chronic pneumonia follows the lobular pneumonia, should be treated by the remedies appropriate to that state. This typhoid state will be less alarming if proper nutriment has been supplied without fatiguing the stomach from the beginning of the disease, and if excessive use of spirits has not so impaired the process of digestion as to prevent the primary assimilation.

It is constantly necessary "to obviate the tendency to death." That physician will be most successful in the treatment of Camp Measles who shall study most carefully this tendency, and be prepared by appropriate means to counteract it.

ON STRABISMUS.*

By HENRY D. NOYES, M.D.,

Surgeon to the New York Eye and Ear Infirmary.

It is a quarter of a century since Stromeyer proposed to cure Strabismus by dividing one or more of the external ocular muscles, and in the same year the operation was successfully done by Dieffenbach. The high repute which the operation soon obtained has been tarnished by failures, and so numerous as to lead some surgeons to abandon it.

Before we admit this verdict, let us inquire into the reasons of failure, and try to point out the principles which should govern the operation.

A person having strabismus is afflicted with a deformity, sometimes slight, sometimes extreme, always conspicuous. More than this, he is deprived of the combined use of both eyes. This deprivation is not so bad as in the case of absolute loss of one eye, but he is unable to direct both eyes simultaneously upon a given object, and he thus loses the great benefit of binocular vision, viz. the quick perception of distances and the sense of depth. Monocular vision can never compare with binocular vision in

imparting to the sensorium ideas of perspective and solidity. This is the chief loss to the patient having strabismus.

The removal of either or of both these disadvantages is certainly a worthy object for the surgeon.

The correction of deformity was at first the simple object proposed. It was noticed that many times the patient improved in eyesight. But improvement of vision was not the primary intent of the operator, because when deficient, he was, in many cases, utterly unable to tell the reason why.

Twenty-five years' experience has set us on the vantage-ground of being able to decide whether the case admits only of improvement in personal appearance, or whether we may hope to attain the higher advantage of binocular vision. It has also taught us more correct methods of operating. We thus possess greater precision of aim and a more accurate mode of attaining it.

Let me epitomize the facts we have acquired, or which we understand better than formerly.

The muscles of the eye are, of course, subservient to the function of sight, and to understand their action, both in health and disease, I must set forth some of the principles of binocular vision. The images of objects which we are looking at directly, are formed on the retina at its central point, which is known as the macula lutea. If an object cast an image on the macula lutea of each eye, we perceive but one image and judge that there is but one object; if in one eye the image be cast upon any other point than the macula lutea, we have diplopia. The image falls correctly when the visual line of each eye is directed upon the object, for then it is pictured on each macula lutea.

If I am looking at a small and distant object, the knob of a door across the room, it is only needful that the centre of each retina be opposed to the subject. But I look at a man twenty feet distant, and other adjustments must be made, for the image now formed on the retina has appreciable length, instead of being a mere point, as heretofore supposed, and it is not indifferent how that line should lie. Suppose the interior of the eye to be divided into quadrants by two lines, one running vertically, the other horizontally, and intersecting at the macula lutea. The upper and lower quadrants on the right hand of each eye correspond; the upper and lower quadrants on the left hand of each eye correspond. If the image of a man in one eye coincide with the vertical meridian, it may not in the other fall obliquely across this meridian, even at the macula lutea. The two images must be parallel. In other words, the vertical meridians must be parallel, and the images must fall upon parts in each retina which correspond to each other. Let us apply these postulates.

If the man supposed, be to the right side, the right external rectus and the left internal rectus pull the eyes around, and the vertical meridians remain parallel. If he be on the left side, the antagonist muscles work in the same way.

If the man be above so high as to compel us to look up—the sup. rectus pulls the eye up, but at the same time inwards—the top of the vertical meridian will be turned inwards, and the images would not fall upon corresponding parts of the retina. In the right eye the image would fall on the supero-dextral and infero-sinistral; in the left eye it would be in the supero-sinistral and infero-dextral quadrants. This would occasion diplopia. A correction must be made in the position of the vertical meridians, and this is done by the inferior oblique muscles pulling the lower end of the vertical meridian inwards. The external recti can have no influence, for they simply turn the eye outwards, and do not influence the vertical meridians.

If the object be below the horizon, a similar correction must be made to keep the vertical meridian parallel.

If the man be so placed that we must look at him obliquely, say up and to the right hand, a more complicated combination of muscles is brought into play. Thus the

* Read before the New York Academy of Medicine, March 2, 1864.

right eye is turned outwards by the ext. rectus; in this position, the sup. rectus acts to best advantage in directing the cornea upwards; the vertical meridian remains vertical. In the left eye, the rect. int. turns the eye to right side; the sup. rectus upwards, but at the same time has a powerful tendency to incline the top of vertical meridian inwards; the vert. merid. are, therefore, not parallel. Another force must be called upon; this will be the inferior oblique of each eye. In the right, by its insertion below, it pulls the inferior portion of the vertical meridian inwards, the upper portion outwards. In the left eye it has the contrary effect; it counteracts the tendency of the sup. rectus to pull the top of the vert. meridian inwards, and aids strongly in turning the cornea upwards. By this balance of forces, the vert. merid. are kept parallel, while they are inclined to the right at their summits. This position has, by actual experiment, been found to be assumed by the vertical meridians when we look in this direction.

I would not prolong this analysis too far; but allow me to show the muscles which act in turning the eyes *downwards* and to right side. They are the ext. rectus of right eye, aided by its inferior rectus. In the left eye the int. and inferior recti. The inf. rectus pulls the top of the vert. meridian outwards, and destroys the parallelism with its fellow. To correct this, the superior oblique steps in. In the left eye it pulls the top of the vertical meridian inwards and helps to turn the cornea downwards. In the right eye, it gives the top of vert. meridian an inclination inwards similar to the posture of the other vert. meridian. The v. m. are thus parallel and have a leaning at the top to the left side.

If the above corrections in the position of the vert. merid. and of the maculae luteae are not made *diplopia* results. How is this explained?

The eye, although a combination of lenses, may be assumed to be reduced to a simple lens of a given focus, this lens at a certain distance from the retina, and having an optical centre. Every pencil passing through it is refracted, so that its axis passes through the centre of the lens. If the retinal image could be again refracted from the eye and caught upon a screen, it would coincide with the situation of the object. The same fact is expressed in the phrase, that the projection of images from the eye is upon a line drawn from the situation of the image and passing through the optical centre of the eye. This central point is a little in front of the posterior pole of the crystalline lens upon the principal axis of the globe. If, now, in one eye the image fall on the macula lutea, and in the other upon a different spot, the projections will be unlike, and each eye will locate the object in a different place—hence double vision. For example: if, with the image central in the left eye, it fall to the outer side of the centre and upon the horizontal meridian of the right, the projection of the image for the left eye will be to the left of the true situation of the object. These images are *crossed*. If, with central image in the left, the image in the right lie to the inner side of the centre and in the horizontal meridian, the false image will appear to the right of the true position of the object. These are *homonymous* or *correspondent* images. The subject might be elaborated into further details, and by an attentive study of the two images a diagnosis can be made of the muscles at fault, when there is no apparent limitation of motion or deviation in the axis of either eye. I have touched upon this subject as much as concerns my present purpose. It may be interesting to state that careful analysis can determine paralysis of the superior oblique muscle.

When two images are very near together, they appear of nearly equal distinctness; when they are far apart, one is often unnoticed. This, for two reasons: the sensibility of the retina diminishes as you approach its margin, and the image which falls in this region is not only projected out of the direct range of sight, but is feebler than the true image. Besides, patients can suppress or ignore the false image by a voluntary act of consciousness. To aid

investigation of double images, a piece of colored glass is put before one eye. To determine their angular separation and to correct diplopia, prisms are employed, and come in the box of spectacle glasses.

What I have said applies to objects at a considerable distance; when the object approaches within ten or fifteen inches, other conditions must be fulfilled to secure correct binocular vision. The visual lines, in viewing distant objects, are nearly parallel, or but slightly convergent. For near objects, the visual lines must converge much more. This calls for increased action on the part of the internal recti, and they must contract more than the remaining muscles, in whatever part of the field the object may be placed. But, to see an object distinctly when ten inches from the face, requires, also, an optical adjustment of the eye. The crystalline lens must increase in thickness, to bring the rays from so near a point to a correct focus. Two adjustments are thus demanded: increased convergence of the visual lines, and activity of the ciliary muscles, to bring about the optical accommodation. These two functions are in close association, and we shall see that this fact has an important bearing upon strabismus.

Strabismus may originate in an affection of the muscles; either spasm or paralysis; or a defect in sight may be the originating condition, and the muscular lesion its result.

First, when the muscular lesion is the only cause. Spasm of the ocular muscles occurs in convulsive diseases and produces temporary squint; intestinal worms are assumed to cause permanent squint; this assumption is, at least, of doubtful validity. In short, spasm may be regarded as having little to do with permanent squint.

Paralysis, however, is a frequent cause. The external rectus is its most frequent victim. Any or many muscles may be affected. The eye is given over to the influence of the sound antagonist muscles, and may assume any position. When paralysis of a muscle is complete, the eye is said to be in a state of *lucitas*. Paralysis may be incomplete—the muscle can carry the eye a little way, but not to the extent of its normal excursion. Whether complete or incomplete, paralysis causes strabismus when the eye looks towards the side of the paralysed muscle. There will then be diplopia, and this often very annoying.

A paralysed muscle may recover its contractibility and a permanent squint result notwithstanding. This happens thus: Suppose the right external rectus paralysed, but not wholly. In looking to the right side a convergent strabismus appears and homonymous double images. If they are near together, the external rectus, by an increased nervous impulse, is stimulated to unusual effort to pull the visual axis outwards and relieve the diplopia. But while the right external rectus receives increased nerve power, the same increase of force is carried to the left internal rectus, in virtue of the association of movement belonging to these two muscles; it contracts more strongly, and against this effort the feeble external rectus of the other eye is powerless; a converging squint results. The right external rectus gains power, the left internal rectus hypertrophies, shortens, finally undergoes fibrous degeneration, and an alternating convergent squint is established. Either eye can fix upon an object, but when one fixes, the other always turns in; both will be limited in their power of turning outwards, one, because of the original paralysis of the ext. rectus, the other, because its external rectus has the shortened and hypertrophied internal rectus to contend with.

Another subdivision of this class of cases is one which occasions temporary strabismus, and that divergent, namely, insufficiency of the internal recti. By this term is meant something so much less defective than paralysis, that no outward deviation appears, no double images in distant vision. But when the eyes are directed to a near object, after a certain time, pain occurs, vision becomes indistinct, letters run together, they become doubled, and the eyes are observed to diverge. After a little rest they

assume their natural relation. This affection is one of the causes of asthenopia.

If one eye have very imperfect sight, or be blind, it follows the movements of the other, as it were, mechanically. Its muscles do not receive a directing impulse from the sensorium, because it conveys no sufficient impression to it. Under these circumstances, a passive monocular strabismus often takes place. The eye has full power of motion in all directions, but it cannot fix with certainty upon the object of sight. This passive strabismus is most frequently divergent; it is also convergent.

Again, it is a frequent observation that strabismus is the consequence of opacity of the cornea. The opacity has been thought to be the *direct* cause of the squint, because it has been assumed the eye takes an oblique position to get the benefit of the clearer part of the cornea; and if the opacity be on the inner side, that the eye turns inwards to admit light more readily through the clear cornea on the outer side. This looks plausible, but it is optically incorrect. The light emanating from a given object which may pass from the margin of the cornea through the pupil, is refracted to the same point as the light which comes through the centre of the cornea. If the object be in front, its image is found at the macula lutea in spite of the corneal opacity; the image is fainter, because less light is transmitted, and the opacity casts upon the image diffused light, which mars its distinctness. But if the eye turn inwards to get a better image of an object in front, the result is either diplopia, or monocular vision by suppressing the image of the other eye. It is true that, with an opacity on the inner side of the cornea, indirect sight may become relatively better than direct sight. But the act of squinting is not a voluntary effort to get more perfect binocular vision. Rather is it a passive strabismus, because sight is very defective, or the voluntary removal of a blurred image out of the field of view; or it is the effect of inflammation extending along the sclerotica to the adjacent muscle, and causing organic contraction of its tissue.

(To be continued.)

WEIGHT OF THE LUNGS.

By H. ALLEN, M.D.,

ASSIST. SURGEON, U.S.A.

In a series of post-mortem examinations, 200 in number, made at the Lincoln General Hospital, Washington, D.C., during the past eighteen months, the weight of the various organs was carefully noted. It has since been suggested that the conclusions drawn from the weighing of the lungs in these cases be recorded, since anatomists have paid but little or no attention to the subject.

Out of the 200 pairs of lungs 68 were found healthy. The smallest weight of any of this number was observed in a case of chronic diarrhoea; the right lung weighing but $8\frac{1}{2}$ oz., the left 9 oz. The largest weight was seen in a case of diphtheria, the right weighing 20 oz., the left lung $18\frac{1}{2}$ oz. The average weight of the whole number was, for the right lung, $15\frac{1}{2}$ oz., for the left lung, $14\frac{1}{2}$ oz. In 7 out of the 41 cases of chronic diarrhoea, the lungs gave small weight. The aspect of the organ in these cases was peculiar. They were shrunken, and occupied but a small portion of the thoracic cavity; the distance between the anterior thoracic wall and the lung being in some specimens as great as $2\frac{1}{2}$ inches. The parenchyma was dry, with little bronchial secretion evident, and no appearance of the pinkish hue of the healthy lung was presented. Owing to the absence of blood and to the presence of pigmentary matter, the tissue was everywhere of a greyish color. The remaining 132 specimens were diseased; the majority from pneumonia and pleurisy. A large number were congested and rendered heavy, the parenchyma being charged either with the sero-sanguineous fluid of commencing pneumonia, or the greyish oedema of imperfect convalescence from the same disease. It would be uninformative to give the weight of the lungs in each case,

since no two specimens were alike; they varied greatly in the degree of complication of the congestion or consolidation. The heaviest organ was observed in a case of nearly complete double pneumonia; in which the last stage of red hepatization was attained in both lungs, with the exception of the apex of first lobe, left side, which crepitated under pressure. The right lung weighed 50 oz., the left 52. The smallest weight of any diseased lung was noticed in a case of plithisis, in which the relative weight of right and left lungs was as $8\frac{1}{2}$ oz. to $7\frac{1}{2}$ oz. The first 75 of these weights were recorded under the auspices of Assistant Surgeon G. M. McGill, U.S.A., the remainder by myself. The examinations were all made shortly after death, and it is believed that no decomposition had taken place in any of the specimens.

BULLET EXTRACTED FROM THE STERNUM,

IMBEDDED THERE SINCE THE BATTLE OF MALVERN HILLS,
JULY 1, 1862.

By WM. O'MEAGHER, M.D.,

-SURGEON, 69TH N.Y.V.

PRIVATE John Kearney, Co. G, 69th N.Y.V., was wounded by a rifle bullet at the battle of Malvern Hills, July 1st, 1862, the ball entering two inches to the left of the mesial line, at the fourth rib, and lodging in the lower portion of the body of the sternum. Various efforts were made by counter-openings to remove it, but in vain; and after nine months, during which he was constantly in hospital in Washington and New York, he was discharged as unfit for service. The wound had healed to a certain extent, and he went to work at his trade of shipwright, but afterwards re-enlisted, February, 1864, when, owing to dissipation and an active campaign on Riker's Island, where he was exposed to all the deleterious influences for which that dépôt gained an unenviable notoriety, and which were so well calculated to *unfit* recruits, and even veterans, for active service, the wound broke out afresh, became extensively inflamed and painful, and an intermittent attack of broncho-pneumonia was superadded. An examination with the common probes, and subsequently by Nelaton's instrument, discovered the location and nature of the foreign substance, which I at first thought was a spicula of carious bone, but finally a free incision down to the bone liberated a considerable quantity of fetid pus, and the bullet was easily removed by a common dressing forceps. No spiculae of carious bone were found loose in the surrounding parts, though several pieces had been previously removed while he was in general hospital. The bullet itself is irregularly flattened down to the second depression or ring at the base, with sharp and jagged edges, presenting altogether as ugly a foreign body as could well be retained with any comfort in such a position for such a considerable period. From its present appearance I should say that it must have first struck either his own or a comrade's musket, but of this he had no recollection.

I think he will be entirely well in a few weeks.

NEAR STEVENSBURG, VA., Feb. 25, 1864.

WE regret to learn that Prof. C. R. Gilman is compelled by ill health to withdraw temporarily from the city. He intends to make his residence for a year at Middleton, Conn., hoping to find in the seclusion and repose of a country residence a restoration of the health and strength which have become seriously impaired by a long continuance in the arduous duties of a trying profession. He trusts to be able to return occasionally during the winter, and to come to town for four days in the week for that purpose. He carries with him into his retirement the esteem and goodwill of his brethren in the profession, and the respectful sympathy and regard of very many of its junior members, who for twenty years past have benefited by his teaching and experience. His collegiate chair will not easily be supplied.

Reports of Hospitals.

BELLEVUE HOSPITAL.

CONCUSSION AND PARALYSIS OF THE DELTOID.

M. C., æt. 50, admitted Jan. 18, 1864. He stated that on the 13th inst. he fell fifteen feet, and struck upon the prominence of the deltoid muscle of the left arm, just below the shoulder. From the moment of the injury he has been unable to raise the arm from the side of the body in a direct line, and thinks the bone is fractured; he can carry the arm backwards and forwards, but not upwards and outwards; and when the arm is raised in the latter direction it gives him pain at the seat of injury. No evidence of a fracture can be detected; the arm is not swollen, and there are no marks of injury. He was directed to use the cold douche, immediately followed by active friction, and was told that it would require a long time for him to recover the free use of the arm.

Jan. 30th.—The above directions have been followed with marked benefit, and he is now able to elevate the arm, though very slowly, to an angle of 45° with the axis of the body. Treatment continued. Feb. 22d.—The arm is still very weak, but can be raised to nearly a right angle with the body; there is no pain upon pressure, and the deltoid muscle is considerably wasted. March 1st.—He is discharged to-day at his own request. He is able to raise the arm at right angles with the body, but it feels very weak and uncomfortable in this position. He is instructed to persist in rubbing the affected arm, and to begin to use it slowly.

This case, though spoken of as concussion of the deltoid, is strictly a case of paralysis of that muscle from concussion of the circumflex nerve which innervates it. These local paralyses from external injuries have not received that attention from surgical writers which they deserve. When it is considered that an accident, similar to the one above stated, may not only temporarily interfere with the function, but also permanently impair the usefulness of a limb, we may begin to estimate the interest of the subject, particularly as regards a prognosis. In this case, although the patient was told from the first that he had no fracture, but would be as long or longer in regaining the use of his arm as though the bone were broken, yet he could not divest himself for a long time of the idea that his case was misunderstood. It is by no means difficult to conceive of the annoyance and mischief which a private patient in a similar frame of mind might occasion a surgeon who had failed to appreciate the true nature of such a case. Professor Willard Parker's "Practical Remarks on Concussion of the Nerves," published in the *New York Journal of Medicine* for Sept. 1856, and referred to by Gross, is the only monograph on this subject with which we are acquainted. In this paper he gives the histories of six cases of local concussion of different nerves, in each of which the functions of the organs supplied by these nerves were permanently damaged. Prof. Parker says: "Analogous to concussion of the nervous centres is what I shall term concussion of the nerves. A number of cases have come under my observation which I cannot otherwise explain than on the supposition that the nerve receives a shock, and the function is for the time suspended. Whether from actual lesion of its tissue, or a disarrangement of its molecular structure, I cannot decide. Moderate exercise seems beneficial, but when the limb is pressed into active service it has seldom failed to become speedily and decidedly worse. There seems from this circumstance to be a loss of the nervous power of the limb, or an impairment of the integrity of the nerves supplying it. The consequence of this condition is, that the limb emaciates, the muscles are more or less atrophied, and the limb becomes permanently incapable of its former usefulness. The proper treatment is rest, alternating with passive exercise, dry friction, and improvement of the general health."

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, May 4, 1864.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

INSENSIBLE PERSPIRATION; ITS IMPORTANCE AS AN EXCRETION.

DR. JOHN C. DRAPER read a paper on Insensible Perspiration. By a series of very careful and ingenious experiments, he proved that the skin was the most important emunctory of the body. He was enabled also to show that the amount of insensible perspiration was proportioned to the exercise that was taken, and that the excretion of urea, under such circumstances, instead of being increased was actually diminished. It was also shown that insensible perspiration was diminished during sleep and increased after the taking of a meal, and that most of the products of destructive assimilation were disposed of by this excretion.

SYPHILITIC DISEASES OF THE RECTUM.

DR. F. J. BUMSTEAD read a paper upon Venereal Diseases of the Anus and Rectum, dividing his subject as follows:—

A.—Venereal affections of the integument and mucous membrane, including

1st. Gonorrhœa of the anus and rectum.

2d. Vegetations, due to the irritation of acrid discharges from the genital organs, but not specific in their character.

3d. Mucous patches, dependent upon syphilitic infections of the system.

B.—Ulcerations, frequently involving the underlying cellular tissue, as well as the integument or mucous membrane; and including

1st. The chancroid, with its various complications; and

2d. The initial lesion of syphilis, or true chancre.

C.—Stricture of the rectum, in which the mucous, cellular, and muscular tissues are all more or less involved.

Under the two first heads Dr. B. gave a succinct account of the pathology and treatment of that rare affection, gonorrhœa of the rectum, and of the vegetations and mucous patches of this region. The latter are so common and so well understood that little opportunity was offered to present any new views of special interest. Venereal ulcerations, which commonly belong either to the chancroid or to the initial lesion of syphilis, also received attention.

The most interesting and important part of the subject, however, was stricture of the rectum of venereal origin. Dr. B.'s remarks confirmed, in the main, Gosselin's researches, first published in the *Archives Générales de Médecine* in 1854.

At the time when all venereal diseases were confounded, this lesion was commonly called "syphilitic." Modern researches, however, have shown that it is not dependent upon infection of the system with the syphilitic virus. Upon post-mortem examination not the slightest trace is found of a deposit of syphilitic tubercle or gummy material, such as infiltrates the tissues in the neighborhood of syphilitic stricture of the larynx, trachea, and œsophagus. Again, at least half of the patients with venereal stricture of the rectum have never presented any evidence of constitutional syphilitic taint; and in those cases in which the two have chanced to co-exist, there has been no uniform correspondence between them; the syphilitic symptoms sometimes belonging to an early, and in others to a late period.

The correct explanation of the etiology of this affection appears to be that given by Gosselin, viz. that it is dependent upon chancroidal ulceration situated upon the perineum or margin of the anus. Chancreoids frequently give rise to a hypertrophied condition of the neighboring cellular tissue, exhibiting a tendency to contraction. This is often observed in the prepuce in men affected with chancreoids, the preputial orifice becoming so contracted as to occasion partial or complete phimosis; in women a similar result is seen in thickening of the labia.

Now the great proportion of cases of venereal stricture of the rectum occurs in women, in whom a chancroidal discharge from sores upon the vulva readily flows upon the perinæum and anus, and, since this discharge is auto-inoculable, may give rise to a chancroid of this region. In fact, in most of the cases of this affection, either such a sore or the cicatrix of one has been actually found, or the patients have confessed to having had one; and, in three cases on record, stricture of the rectum has been developed under the observation of the surgeon, in women who were affected with chancroids of the perinæum or anus, and who presented no evidence of constitutional syphilitic taint.

It is, indeed, not impossible that a strictly syphilitic ulcer might produce the same result, though no instance of the kind has been reported. It would thus appear that venereal stricture of the rectum is an accidental consequence or sequela of chancroidal ulceration, without being directly dependent upon the chancroidal virus; and in this respect it may be compared to stricture of the urethra, which is commonly due to gonorrhœa, without being the direct effect of the gonorrhœal poison. In the one case as in the other, chronic inflammation is the active agent in producing the contraction.

The symptoms of venereal strictures of the rectum are peculiar in some respects, although not pathognomonic in all cases. Cicatrices, if not ulcerations, are commonly found upon the perinæum or margin of the anus. The lower portion of the rectum just within the anus is inflamed, smeared with pus, and often presents the internal openings of fistulæ communicating with the perineum. The stricture itself is more constant in its seat than other forms of this disease, and is almost invariably situated at a point corresponding to the upper edge of the sphincter of the rectum, or about two inches within the margin of the anus. In extent from below upwards, it rarely exceeds four-tenths of an inch. The obstruction is never complete, and will usually admit the tip of the little finger. The bowels are commonly relaxed. The patients suffer from gastric disturbance, and have frequent calls to stool, accompanied by tenesmus. There is a copious discharge of pus, which either oozes away constantly or is found mixed with the stools. This drain upon the system is probably the cause of the emaciation and depression which almost invariably attend the disease.

Post-mortem examination shows that the stricture is made up of fibrous exudation, deposited chiefly in the cellular tissue, but affecting also the mucous and muscular tissues. The mucous membrane at the seat of the contraction can be detected, thickened, and adherent to the cellular tissue beneath. The dilated portion of the rectum above the stricture is found to be extensively eroded, traces of the epithelium and glandular structure of the mucous membrane alone remaining. It is, doubtless, from this portion proceeds the copious discharge of purulent matter.

As to the treatment of venereal stricture of the rectum, no benefit whatever is afforded by the administration of anti-syphilitic remedies, as mercury and iodide of potassium. Local treatment by means of bougies and cautious incisive of the stricture may prove successful at an early period, but, in advanced cases, is only palliative. Every effort should be made to sustain the strength of the patient by tonics and a nourishing diet; and the quantity of the discharge may be diminished by astringent enemata. When death ensues, it is commonly due to exhaustion, or some intercurrent disease, as phthisis.

DISCUSSION ON SPOTTED FEVER.

DR. CLARK stated that the case reported by him at the last meeting was progressing favorably, and there was a strong probability that recovery would ultimately take place. The treatment mainly consisted in following out a diaphoretic plan. He also referred to another case of this fever which had proved rapidly fatal. The symptoms were those that are usually considered as belonging to that affection.

DR. SAYRE was inclined to disfavor the idea of contagion in this disease. He was disposed to think that it might be caused by something that had reference to the mode of living of the people in the affected district. For instance, it had been ascertained that all the grain used in and around Long Branch was grown, and this was either made up into bread, or burnt and made into coffee by being mixed with a due proportion of chickory. The very grain was known to have poisoned horses which had been for some time fed upon it. He was also inclined to believe that the breathing of noxious vapors in close rooms had a great deal to do with bringing on this disease, and instanced the fact that kerosene had been very much used of late for lighting purposes, and when the lamp was not trimmed properly, or "turned to the full," that a very poisonous gas was given off. He, however, only referred to this as one example of many of its kind. He believed that one of the reasons why the disease was inclined to spend its force upon the brain was due to the fact that during the present state of political feeling the minds of the people were wrought up to the highest pitch of mental excitement. He received lately a letter from a western physician who described a similar disease which prevailed in that district of country last year, which was supposed to be due to the eating of poisoned candy, on the occasion of a largely attended holiday feast. This circumstance he also considered of importance in the chain of evidence as to the etiology of the disease in question. As far as he was able to ascertain, the disease had not prevailed in New York. In conclusion, he referred to two cases of cerebro-spinal meningitis which had lately come under his observation, in which no spots appeared upon the body.

DR. WOODHULL concurred in the main with Dr. Sayre, in regard to the questions connected with the etiology of the disease. He thought that the grown grain so largely used of late in Long Branch tended strongly to predispose to, if not actually to cause the disease. The climate, too, had been noticed to be very changeable, and the temperature had differed very greatly in different portions of a rather limited district of country. The fact that the dog-fish had been extensively used for manure might have some influence. He believed that the disease was a blood-poison, and that, if the matter of causation should be properly studied, some prophylactic measures might be interposed to stay the ravages of this unmanageable and fatal malady.

The Academy then adjourned.

{QUININE AS A PREVENTIVE OF MALARIAL DISEASE.—DR. J. W. Page, Inspector for the United States Sanitary Commission in Department of North Carolina and Virginia, reports that the greatest benefit to the health of the forces stationed in the malarial regions about Newbern has resulted from the regular administration of a quinine ration to the men. It is gratifying to hear this statement from Dr. Page, whose long residence in the malarial regions of North Carolina makes him a critical observer. One of the earliest efforts of the Commission, in the direction of the prevention of disease in the army, was to impress upon commanding officers and the Government the prophylactic or preventive powers of quinine. All who are familiar with the medical documents of the Commission will remember the able and exhaustive monograph by Dr. Wm. H. Van Buren on this subject. From all the columns operating in malarial regions, we have heard nothing to impair our belief in the value of quinine as a preventive of malarial disease. It should be taken in doses of three grains at bed-time, and two or three in the morning, continuously through the malarial season. Its value is enhanced when given in connexion with coffee. It is scarcely necessary to state that the curative power of quinine is greatly lessened in the case of those who have become saturated with fever and ague poison, by long residence in malarial regions; of course the experience of such persons cannot be taken as impairing one's belief in the preventive power of the agent.—*San. Com. Bulletin.*

American Medical Times.

SATURDAY, MAY 21, 1864.

THE ARMY RATION.

WE believe it may be safely assumed that there exists no army in the world better fed, better clothed, and in every way better cared for than the army of the United States. While the country with remarkable promptness has yielded the best of its sons, and poured out its treasures for the defence of its institutions and laws, the Government in its turn has, true to its trust, and regardless of expense, furnished the army with a ration, in quality admirably adapted to the demands of the soldier, and in quantity sufficient to satisfy the most ravenous. But the inconvenience, expense, and loss sustained by the present system of furnishing our army with rations, is a subject deserving the careful consideration of the political economist. Unlike the armies of Europe, where the broad, hard, well graded roads and substantial bridges render the communication from place to place comparatively easy; where the compact population and frequent villages afford ample facilities for the comfort and sustenance of the men; our armies are often compelled to travel with their heavy trains over long distances, and much of the time through thinly populated and but partially cultivated districts; their progress often impeded by poorly constructed roads, rendered impassable by a recent heavy rain; streams to be forded, and in short all things combining to retard the progress, and detract from the comfort of the soldiers. The wagons and beeves in the rear of the army are exposed to frequent raids from guerillas, thus subjecting us often to serious losses; or escaping this misfortune, the cattle continually on the march with an inadequate supply of forage, become fatigued, lose flesh, and are often sick, or if transported by rail or water, they are subjected to all the inconveniences of closely packed cars, or perhaps sea-sickness, from the effects of which they do not recover until consigned to the butcher. Under these circumstances, what should be served up as tender, juicy beef, is often of an inferior quality, and consequently subject to waste. Some improvement in the method of supplying our army ration is greatly needed, and we believe fully practicable. The question therefore arises—How can this be effected with the greatest economy to the Government and comfort to the army? We answer, simply by diminishing the bulk, and thereby preserving the quality of the material employed. Science has taught us not only the method of preserving, but also of so condensing different articles of food, as to render their transportation comparatively easy. MR. GAIL BORDEN is daily furnishing many of our citizens with milk, reduced by evaporation to one-fourth its ordinary volume, which enables him to bring it from distances so remote, that, were the milk in its natural condition, the expense of transportation would nearly overcome the profits accruing from the sale of it.

Our attention has been called to this method of furnishing our army ration by a pamphlet* recently published,

* The Army Ration. How to Diminish its Weight and Bulk, Secure Economy in its Administration, Avoid Waste, and Increase the Comfort, Efficiency, and Mobility of Troops. By E. N. HORSFORD, late Rumford Professor in Harvard University, Cambridge, Mass.

in which the author fully discusses the subject of desiccated food, with a view to its economy, especially for army use. The present ration consists of meat, bread, coffee, and sugar, with a sufficient supply of salt, pepper, and vinegar; and vegetables also are furnished while in camp. The bread may be issued as flour, to be prepared at the option of the soldier, or in loaves baked at some of the Government bakeries, or hard bread, crackers, etc., which, though imperishable, are bulky, the daily ration of which occupies a space of about sixty cubic inches. Loaf bread, when fresh, is by far the most agreeable of these preparations for daily use; but in addition to its bulk, containing from thirty to fifty per cent. of water, it has the disadvantage of soon becoming mouldy, or dry and unpalatable, and is rejected as unfit for use. This may be obviated by furnishing the flour to be prepared extemporaneously by the soldier as his taste may dictate; or as the author alluded to suggests, the roasted and ground wheat of the Chilian mountaineer, or the "cold flour" of the Texan ranger—a preparation of roasted corn, ground and mixed with sugar. These preparations are easily transformed into wholesome, palatable bread, of which there may be no necessary waste. The Confederates seem to have recognised this principle, for many of the haversacks taken from the dead and wounded on the field of Antietam contained nothing but flour.

The waste of bread, however, is not equal to that of meat, as the following figures will show:—"An ox in fair condition, weighing 1,500 pounds, will lose, by shrinkage, 500 pounds. The intestinal tallow would weigh 100 pounds more, and the kidney tallow and lump fat 50 pounds more. Altogether, the dressed quarters, without the kidney tallow and lump fat, weigh but half the ox on foot. But the bones, gristle, tendon, connective tissue, and loss of meat in the sinuities of the backbone and along the ribs, reduce the edible portion to the consumer to three-fifths of the weight of the dressed quarters, or three-tenths of the weight of the whole ox. Of these three-tenths, seventy-five per cent. is water. So that an ox weighing 1,500 pounds yields to the consumer, as ordinarily served up, but about 450 pounds of edible meat, with its water, or but one quarter of this, or three-fortieths of the whole, of dry nutritious matter, or 112½ pounds, or 6·8 per cent. of the whole weight of the live ox."

This is the average yield, as proved by experiment upon beeves at rest. But when in the train of an army on the march, the yield is much less, as our author shows by information derived from commissary officers of the Army of the Potomac. "This meat was issued as dressed quarters, which were weighed. So that twenty-four quarters of beef-cattle in the condition in which they were slaughtered in that army, weigh on an average 20,000 ounces, or 1,250 pounds. Assuming the bone, tendon, and gristle to be three-fourths of the whole dressed quarters, which is not far from the fact, there would remain 312½ pounds of edible meat, or 52 pounds to an ox; of which one quarter only is dry nutriment, or 13 pounds to an ox. And this is an average specimen, estimated by the commissary officers, from whom I have received the information, to have weighed, when purchased by the Government, 1,300 pounds on the hoof. Six of these must have weighed 7,800 pounds, and would cost now, delivered at eight cents a pound, \$624! *Seventy-eight pounds out of seventy-eight hundred! One per cent. only!*"

We here lose not only the hide, bones, tallow, etc., but the country is being fearfully drained of cattle of which the soldier, though well fed, receives but little benefit compared to the expense incurred. The rational methods of economy are suggested by the author of the pamphlet, viz. either by desiccation by means of dry heat at the temperature of 110° to 125° Fah., by which the meat is reduced to its least possible bulk and at the same time rendered imperishable, or by means of cans excluding it from the air; or what is better, by means of sausage, with which every edible part of the animal may be incorporated, the cleaned intestine forming the perfect can; or, in the deficiency of this material, tubes may be made of cotton or linen, dipped into gelatine and afterwards into tannin; or the sausage material may be compressed into cakes, and varnished with gelatine derived from the scraps of the hides. Suitable establishments in the cattle-raising districts, with the facilities for carrying out these suggestions, would save to the country a large percentage of the cattle now wasted; and to the Government enormous expense of transportation. It would secure to the soldier a wholesome, substantial ration, of which there need be no waste, and in so compact a form as to enable him to carry fifteen days' rations with as much ease as he now carries five days' rations, and which during the entire march will remain as fresh and palatable as when first issued. The same holds true of the bread ration. By issuing self-raising flour, or roasted wheat, instead of loaf bread and "hard tack," we may reduce the magnitude of supply trains, and in the same proportion obviate the danger of loss by capture or other accident, and also increase the mobility of the army.

AID TO THE WOUNDED.

THE Volunteer Corps of Surgeons from New York and the States in the vicinity have readily responded to the call for aid to the wounded in the recent battles of the Army of the Potomac, and are now rendering efficient service at Fredericksburgh, Belle Plain, and Washington. The number of wounded, however, is increasing from day to day, and the need for even more help is very urgent. A great many additional surgeons have volunteered their services, and there is still work for more. We hope that the supply will be equal to all demands, and that numbers will avail themselves of the opportunity for doing a good work by giving every aid in their power, and relieving those who are already there, and who, ere this, are worn out by arduous services. The Surgeon-General of this State, Dr. QUACKENBUSH, has recently been in the city to perfect arrangements for sending on all the additional help which may be called for, and too much praise cannot be given him for the manner in which he has performed his duties. We have great confidence in the workings of the volunteer system, and think it safe to say that the assistance which they will be enabled to furnish their brethren in the field cannot be lightly estimated. We understand that there is also a want for younger men in the hospitals around Washington, and we need not urge those who are anxious to study their profession to improve the opportunities which are now offered them.

ROOSEVELT HOSPITAL.

THE Trustees of the Roosevelt Hospital are now busy in selecting a suitable site for the immediate erection of the building, and we learn that it is their intention to secure

an elevated, airy, and healthy location away from the city. All the improvements that have recently been made in hospital construction are to be taken advantage of, and the community will doubtless soon be able to realize to the fullest extent the intentions of the munificent donor. There is nothing to hinder its being the model hospital of the country. It is handsomely endowed, and the superintendence of its erection has been placed in responsible hands.

THE CENTRAL PARK.

THE Central Park has now become an institution of the city, and we are glad to see that its popularity is on the increase year by year. Thousands visit it daily, and take an airing either in the way of a fashionable drive, a horseback ride, or, after the more democratic fashion of exercise, on foot. This practice cannot fail to tell upon the people in a sanitary point of view, and we can confidently look forward to the time when our pale, narrow-chested, and feeble youth will be replaced by a race of stalwart men and women. There is nothing which will tend to bring about such a result more surely and rapidly than horseback exercise, which we are glad to see is gaining extraordinary favor with the people.

MEDICAL CALIGRAPHY.

WE publish in another column a letter from DR. STUDLEY in reference to the case of death by poisoning, to which we alluded in our recent remarks on medical caligraphy. Although we are not responsible for the accusations contained in this letter, we publish it in full, believing it is but just that Dr. Studley should be heard, leaving the reader to draw his own conclusions. The remarks of which he complains, though provoked by the case in question, were intended more as a criticism upon the vague and careless manner in which far too many physicians write their prescriptions. We venture to affirm that there is not an apothecary in New York who would not corroborate what we have said, and testify to the annoyance to which he is repeatedly subjected from this very cause. Were there a law in force compelling physicians to write with a pen and ink, instead of a pencil, the alteration of which Dr. S. speaks would not be so easy a matter. We repeat, therefore, that the welfare of all concerned imperatively calls for more care on the part of physicians in writing their prescriptions.

Obituary.

MARTIN E. WINCHELL, M.D.

It is always a painful duty to announce the death of a professional brother, especially one who has resided in our midst, and with whom we have been on terms of intimacy, though the severity of the affliction be somewhat mitigated by the fact that our friend has left a name beloved by all who knew him, and unsullied by a single blemish. Martin E. Winchell, M.D., was born in Dutchess county, N. Y., in the year 1827, and graduated at the Medical Department of Yale College in 1853. After receiving his diploma he accepted the appointment of Assistant-Physician to Kings County Hospital, which he held during the usual term, after which he was appointed to the New York State Lunatic Asylum, where he remained until July, 1856. He then located for general practice in this city, where he remained until within a few months of his death. While in practice here, he was connected with the North-western and Demilt Dispensaries, became in due

time a fellow of the Academy of Medicine, and a member of the New York County Medical Society. He was married in October, 1863, and the following March, with his wife and a few friends, he removed South, and at the invitation of the Government settled upon an abandoned plantation, about forty miles below Vicksburgh, for the purpose of cultivating the land, establishing schools for the education of the negroes, and at the same time affording a revenue to the Government. Having by his efforts to ameliorate the condition of the blacks become obnoxious to some rebel neighbors, his place was attacked by guerillas, and in the skirmish he was shot through the heart. He instantly fell, but the fiends, not satisfied with their work, fired several times at his lifeless body. This occurred on Sunday morning, May 1st, as he was about to organize his Sunday-school. It was by remarkable presence of mind that Mrs. Winchell escaped sharing the fate of her husband. Dr. Winchell was generous and manly in his dealings with others, modest in his deportment; he was an industrious student, a conscientious practitioner, an ardent, devoted friend, and a sincere Christian. The body was brought home for interment.

Correspondence.

[To the Editor of the AMERICAN MEDICAL TIMES.]

IN your editorial remarks upon "Medical Calligraphy," in your issue of April 30th, you undoubtedly had reference to the case in which my name figured somewhat conspicuously. However true your remarks may be as regards the manner in which physicians generally write their prescriptions, and to which you are pleased to attach the term "criminal carelessness," and however judicious your advice thereupon, you certainly can make no just application of them to me. The salient points upon which I must take issue with you are, first, the broad statement that my prescription was not plainly written; secondly, that a badly written prescription amounts to a crime; and thirdly, that if a druggist fails to make out clearly the meaning of the writer, he is forced into the dilemma of either substituting a harmless remedy, or run the risk of an indictment by a grand jury. In regard to your first statement, permit me to say that it is an easy matter to charge upon the majority of physicians "criminal carelessness" in writing their prescriptions, and by logical deduction fasten upon me, individually, the guilt of such crime; but does it not occur to you that careless editorial statements, whereby a man's good name is aspersed, are equally if not far more criminal? It is true that the jury included in their verdict a clause recommending physicians to write their prescriptions plainly, clearly, and in full; but did not one of the jurymen, when a false inference reflecting upon me appeared in the papers, deem it but an act of justice to make a public statement through the same organs, to the effect that it was the undivided opinion of the whole jury that no censure whatever was to be attached to me, and that the clause referring to physicians was introduced simply as a precautionary measure, and intended to reflect upon no one? Did not I, a few days afterwards, state in a card that the jury, observing the erroneous opinions afloat, had deemed it their duty, in a written protest, to express themselves unanimously to the effect that the above clause in their verdict was suggested simply as a precautionary measure, not basing it at all upon any evidence that my prescription was not written plainly, but on the contrary, that it appeared to them perfectly legible and correct? And yet in the face of all this, you make the unqualified statement that my prescription was not plainly written. You are yet evidently in the dark about this whole affair, and it is undoubtedly a duty which I owe to the profession as well as myself, to make a plain statement of the facts, that all

may judge from more reliable data than the proverbially false statements of newspaper reporters.

Mrs. F— had been under the treatment of the druggist in question (who claims to be a homœopathic physician, keeps a small drug-shop, and, as I am informed, doctors homœopathically or allopathically, according to the desire of the patient), when I was called to take his place. The change chagrined him, and he made some very unfortunate remarks thereupon, as I am informed by the husband of the deceased. I treated her for uterine ulceration and a temporary aggravation of Bright's disease, under which she had been suffering undoubtedly for years. She was getting better, when, as a simple tonic and an aid to digestion, I gave the following prescription:—

R. Acidi Nitrici ʒi.

“ Hydrochlor. ʒii.

Aquæ Puræ ʒi. Mix.

S. ten to twelve drops in a wine glass of water after each meal.

W. H. S.

Contrary to instructions, but by permission of the patient, the nurse took the prescription to the above druggist. Hydrargyrum was substituted for hydrochloric acid. Some two or three doses were taken; some nausea, vomiting, purging, and cramps in her legs followed; I was called, and upon examining the contents of the phial I exclaimed that she had been taking poison. I went immediately to the druggist, called for my prescription, and upon reading it over found it as clearly and correctly a written prescription as I ever gave in my life. I at once charged him with making a serious mistake, and told him that I must have witnesses in this matter, and was about stepping to the door to call in some passers-by, when he stepped before me and told me that I could not go out of that door unless I was stronger than he and his weapon. I then asked him to go with me to any respectable druggist, and have the prescription submitted for inspection. This request was made repeatedly in the presence of witnesses who had come in. He refused. I then asked him to give me a copy; after some hesitation he consented. I wrote a copy, word for word; gave it to him; told him to compare it faithfully with the original, and sign it, as being a true copy. He did so, with the qualification that it was more clearly and plainly written. Having some evidence in my possession, I now trusted the matter long enough to hurry off to Mr. Gould, a most competent druggist in Yorkville, for the purpose of getting him to come with me and a policeman to inspect the original prescription. He was busy at that moment, and I went immediately to Kip's drug store, and procured a Mr. Nattan, a very competent German druggist, who, with policeman Abbot, accompanied me. We demanded the prescription, and received for our answer that his son had taken it away with him, and could not be found. Thus the matter ended, until the death of Mrs. F—, some two weeks afterwards. She seemed to get over the more immediate effects of the medicine, but in a few days peritonitis set in, beginning in the right iliac region, and from this, as a starting point, it spread over the whole abdomen. I called Professor Thomas, of the College of Physicians and Surgeons, and he can substantiate the latter remarks. At the inquest the druggist was called upon to produce my prescription. He stated that it was in the possession of his son, who lived down town. The son was not present, and the inquest was deferred to another day, when the prescription was presented, most unfortunately for the man, in the following wretchedly tampered, unmeaning condition:—An attempt had been made to erase the letters "chlor" in the word Hydrochlor. and to substitute something like a "g" in their place, so as to make the prescription read:

Acidi Nitrici ʒi.

“ Hydrog. ʒii.

etc., etc.

But unluckily the "g" was in a darker pencil mark, while traces of the letters "chlor" are still left plain enough for any expert to decide that such letters were once there.

All you have to do is to go to No. 4 Centre street, the Coroner's office, and convince yourself of the truth of my statement by looking at both of the prescriptions—the original and the copy. Such being the case, I leave it for others to decide whether to charge this unfortunate matter at the door of senile incapacity and stupidity or to malignant villany.

Certain it is that I have ample grounds on which to base very painful suspicions. I leave the other points for a future communication.

f W. H. STUDLEY, M.D.

99 EAST FORTIETH STREET, May 9th, 1864.

Army and Navy Intelligence.

CIRCULAR LETTER.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., May 3, 1864.

In future the retention of \$2.00 from the monthly pay of Contract Nurses will be discontinued, and the pay proper, \$13.00, will be given each month.

The total retained pay that may be due these nurses will be stated upon the first muster-roll made after the receipt of this order, and will be paid by Medical Purveyors upon the duplicate certificate of Medical Officers in charge of Hospital, which will be a sufficient voucher.

Very respectfully,

Your obedient servant,

By order of the Acting Surgeon-General:

C. H. CRANE,
Surgeon, U.S.A.

ORDERS, CHANGES, &c.

APPOINTMENTS.

Reverend W. G. Leonard, of Maryland, to be Hospital Chaplain, U.S.A., at Point Lookout, Md.

DISCHARGES, DISMISSALS, ETC.

Assistant-Surgeon L. W. Baker, 17th U.S. Colored Troops, honorably discharged on tender of his resignation, and on recommendation of his superior officers.

Hospital Steward Alfred C. Pettitt, U.S.A., honorably discharged at his own request.

Surgeon H. J. Maynard, 1st Arkansas Cavalry, dismissed for absence without leave.

Assistant-Surgeon Matthew T. Locke, 4th Tennessee Vols., dismissed, having failed to appear before a military commission to account for absence without leave.

Surgeon G. S. Oshorne, 5th Massachusetts Cavalry, honorably discharged at request of the Governor of Massachusetts, on tender of his resignation.

Surgeon Adolf Majer, U.S.V., dismissed for disobedience of orders.

Surgeon Hall Curtis, 2d Massachusetts Heavy Artillery, honorably discharged, having tendered his resignation on account of physical disability.

RESIGNED.

Surgeon J. C. Dorr, U.S.V., May 4, 1864.

Surgeon J. G. F. Holston, U.S.V., May 6, 1864.

Surgeon J. T. Carpenter, U.S.V., May 15, 1864.

Chaplain W. J. Potter, U.S.A., May 10, 1864.

LEAVES OF ABSENCE.

2d Lieutenant E. Crosby, 115th Co. Veteran Reserve Corps, for thirty days.

Assistant-Surgeon W. S. Woods, U.S.V., for twenty days, on account of ill-health.

Surgeon A. Chapel, U.S.V., for two days.

Chaplain A. G. Thomas, U.S.A., for twenty days.

Surgeon D. B. Sturgeon, U.S.V., now on leave, twenty days' extension.

Surgeon J. Leander Bishop, 7th Pennsylvania Reserve Corps, for ninety days, from June 15, 1864, to assist Mr. C. G. Kennedy, Superintendent of the Census, in preparing the forthcoming Report on Manufactures, provided his regiment is in service and that his Medical Director can spare him.

Surgeon C. B. White, U.S.V., now on leave, twenty days' extension.

ORDERS.

Surgeon A. M. Clark, U.S.V., is relieved from duty with the Commissary General of Prisoners, and will report to the Commanding General, Department of Virginia and North Carolina, for duty.

Surgeon C. F. H. Campbell, U.S.V., is relieved from duty in the Department of Virginia and North Carolina, and will report to the Commanding General, Department of Missouri, for duty.

Surgeon C. T. Alexander, U.S.A., is relieved from duty in the Department of Missouri, and will report to Colonel William Hoffman, Commissary General of Prisoners, for duty.

Lieutenant-Colonel S. H. Lathrop, Assistant Inspector-General, 22d Army Corps, is relieved from duty as President Hospital Examining Board, convened by S. O. No. 414, series of 1863, from the War Department.

ASSIGNMENTS.

Assistant Surgeon J. W. Applegate, U.S.V., as Surgeon-in-charge, General Hospital No. 2, Beaufort, S. C.

Surgeon William Hayes, U.S.V., as Acting Medical Inspector, Forces in the Field, Department of West Virginia.

Surgeon John W. Foye, U.S.V., as Acting Medical Director, 20th Corps, Army of the Cumberland.

Surgeon G. F. French, U.S.V., as Surgeon-in-charge, General Field Hospital, Huntsville, Ala.

Assistant-Surgeon P. C. Davis, U.S.A., as Treasurer Officers' Hospital, Georgetown, D.C.

Acting Assistant-Surgeon J. G. Coates, U.S.A., to McKim's Mansion Hospital, Baltimore, Md.

Acting Assistant-Surgeon F. A. Seymour, U.S.A., to General Hospital, Jeffersonville, Ind.

Surgeon Joshua Owen, U.S.V., to the Depot for Wounded, Fredericksburg, Va.

Acting Assistant-Surgeon W. H. Wey, U.S.A., to Clay General Hospital, Louisville, Ky.

Acting Assistant-Surgeon J. H. Stockdell, U.S.A., to General Hospital, Lexington, Ky.

Surgeon K. R. Taylor, U.S.V., to General Hospital No. 8, Nashville, Tenn., as Surgeon-in-charge.

Surgeon J. M. Leete, U.S.V., as Surgeon-in-Chief, 1st Infantry Division, Forces of West Virginia.

Surgeon E. W. Thurn, U.S.V., as Surgeon-in-Chief, 4th Division, 20th Corps, Army of the Cumberland.

Surgeon J. R. Ludlow, U.S.V., to Hospital duty at Nashville, Tenn.

Surgeon J. J. Craven, U.S.V., as Medical Director, 10th Corps, Department of Virginia and North Carolina.

Surgeon J. T. Heard, U.S.V., as Medical Director, 4th Corps, Army of the Cumberland.

Surgeon G. R. Weeks, U.S.V., as Acting Medical Inspector, Department of Arkansas.

Surgeon P. Cleary, U.S.V., as Attending Surgeon Garrison Artillery, Chattanooga, Tenn.

Surgeon F. Lloyd, U.S.V., as Surgeon-in-Chief, 3d Division, 14th Corps, Army of the Cumberland.

Assistant-Surgeon W. W. Wythes, U.S.V., as Surgeon-in-charge, General Hospital No. 4, Knoxville, Tenn.

Surgeon C. S. Friss, U.S.V., to the 23d Army Corps, Army of the Ohio.

Assistant-Surgeon T. A. McGraw, U.S.V., to the General Hospital, Chattanooga, Tenn.

Surgeon B. Beust, U.S.V., to General Hospital, Corps d'Afrique, New Albany, Ind.

Surgeon J. E. Herbst, U.S.V., as Surgeon-in-charge, Officers' Hospital and General Hospital No. 2, Nashville, Tenn.

Surgeon J. J. De Lamar, U.S.V., to report at Headquarters, Department of Virginia and North Carolina.

Surgeon N. P. Rice, U.S.V., as Surgeon-in-Chief, General West's Division, Department of Virginia and North Carolina.

Surgeon W. N. Smith, 47th New York Vols., as Surgeon-in-charge of Hospital Steamer "Monitor."

Surgeon J. M. Robinson, U.S.V., as Surgeon-in-Chief, General Max Weber's command, Harper's Ferry, Va.

Assistant-Surgeon F. Wolf, U.S.V., to Artillery Brigade, 2d Corps, Army of the Potomac.

Assistant-Surgeon A. Van Cleef, U.S.V., to the 1st U. S. Cavalry, Army of the Potomac.

Surgeon R. D. Lynde, U.S.V., to 3d Division, 4th Corps, Army of the Cumberland.

Surgeon A. M. Wilder, U.S.V., as Medical Director, Cavalry Corps, Army of the Ohio.

Assistant-Surgeon J. A. Freeman, U.S.V., to General Hospital No. 8, Nashville, Tenn.

Surgeon Wm. Grinstead, U.S.V., as Surgeon-in-Chief, 3d Division, 20th Corps, Army of the Cumberland.

Acting Assistant-Surgeon J. Bradley, U.S.A., as Surgeon-in-charge, General Hospital No. 16, Jeffersonville, Ind.

Acting Assistant-Surgeon J. J. Kincaid, U.S.A., to Jefferson General Hospital, Jeffersonville, Ind.

Surgeon S. E. Fuller, U.S.V., as Examining Surgeon of men transferred to the Veteran Reserve Corps, at Nashville, Tenn.

Assistant-Surgeon H. L. W. Burritt, U.S.V., as Medical Inspector, 23 Corps, Army of the Ohio.

Surgeon E. Shippen, U.S.V., as Medical Director, 23d Corps, Army of the Ohio.

Surgeon Josiah Curtis, U.S.V., as Assistant Medical Director, Department of the Ohio, Knoxville, Tenn.

Surgeon A. C. Benedict, U.S.V., as Surgeon-in-Chief, 2d Division, 10th Corps, Department of Virginia and North Carolina.

MISCELLANEOUS.

The appointment and muster into service of Alfred Keiser, as Assistant-Surgeon 124th Indiana Vols., have been revoked, it having appeared from examination by a Medical Board that he was unfit for duty when mustered in, and there being no evidence of service.

The Provost Marshal-General is authorized to send Surgeon J. H. Baxter, U.S.V., upon tours of inspection in the different States, where the draft is or may be ordered.

Assistant-Surgeon C. C. Topliff, 19th U. S. Colored Troops, has been relieved from duty at McKim's Mansion Hospital, Baltimore, Md., and ordered to his regiment.

Surgeon E. McDonnell, U.S.V., has relieved Surgeon C. W. Jones, U.S.V., in charge of University General Hospital, Baltimore, Md.

So much of Special Orders No. 478, series of 1863, from the War Department, as dishonorably dismissed Hospital Chaplain C. H. Powell, U.S.A., has been revoked, and he is honorably discharged.

So much of Special Orders No. 117, current series, from the War Department, as honorably discharged Assistant-Surgeon Gerhard Saal, U.S.V., has been revoked, and he will report to the Surgeon-General U.S.A., for assignment to duty.

So much of Special Orders No. 429, series of 1863, from the War Department, as dismissed Surgeon J. Owen, U.S.V., has been revoked, and he will report to the Surgeon-General for orders.

Surgeon F. Greene, U.S.V., has reported for orders at Louisville, Ky.

Surgeon G. S. Palmer, U.S.V., is sick at the Massachusetts General Hospital, Boston, Mass.

Surgeons P. A. O'Connell and J. G. Hatchitt, U.S.V., have returned from leave of absence and reported for duty at their former stations.

Original Lectures.

LECTURES ON GUNSHOT INJURIES OF THE ABDOMEN.

By FRANK H. HAMILTON, M.D.,

PROF. OF MILITARY SURGERY AND FRACTURES AT BELLEVUE HOSP. MED. COLLEGE, AND LONG ISLAND COLLEGE HOSPITAL; SURGEON TO BELLEVUE HOSPITAL; LATE MEDICAL INSPECTOR, U.S.A.

LECTURE VI.—PART III.

I HAVE already explained the causes and the manner of these fecal extravasations, and we have seen how the opening of the wound and the admission of air, or the disturbing of the viscera by the finger or by any other means, is liable to greatly increase this tendency to extravasation.

In most cases, when the ball has penetrated the small intestines, they are found to have been perforated at several points. In my experiments, lately made upon the dead subject, this has happened uniformly. Let us consider, then, what will be the probable consequences of this practice of M. Legouest. The moment the finger is introduced its pressure alone will be sufficient to expel a portion of the contents of the intestinal tube; but in most cases the position of the wound in the intestine will be so changed that a prolonged exploration will be necessary to determine the existence of a wound and its situation, and the fæces will continue to escape. Assuming, however, that the surgeon is successful at once in finding and securing a portion which is wounded, he will now proceed to enlarge the external wound, if necessary, and to draw out the intestine; he will remove the contused and lacerated edges of the wound with the scissors or with the knife, apply the sutures, and return the intestine within the cavity of the abdomen.

All this must occupy some time, probably never less than half an hour; and what has been in the meantime happening within. While the surgeon was drawing out and handling the wounded knuckle of intestine, the contents of the remainder of the tube have been pressed back, and have been pouring out from one or more of the other wounds; and it now remains to search for these deeper outlets, and, at a time when it is plainly too late to be of any use, to secure and close them also. It will not do to say that these operations must be done with care; that, in order to encourage a hope of success, the parts must be handled with delicacy; that the opening in the walls of the abdomen must be made free by ample incisions. Any surgeon who has had experience in operations upon the abdomen knows very well how unmanageable these viscera ordinarily are when once they have escaped from the peritoneal cavity; how difficult it is to restrain their further protrusion; and how difficult it is often to reduce them again, no matter to what extent the abdominal opening is enlarged. These difficulties occur, as my experience has repeatedly proved, even when the patient is completely under the influence of an anæsthetic, although not quite to the same extent. In short, delicacy of manipulation under these circumstances is often next to impossible.

Be assured, gentlemen, the patient will have a better chance for life if you let him entirely alone; and it surprises me that any good surgeon could think otherwise. Serous surfaces, when brought into contact, in general adhere quickly; and if we adopt in these cases that treatment which is best calculated to secure and maintain contact between the viscera and the walls of the abdomen, we may often encourage a hope of a successful issue.

The plan of treatment which accomplishes these indications most fully, in case a rifle, musket, or pistol ball has penetrated the intestines, is to close the external wound with a pledget of lint smeared with cerate, and to secure this in place by a broad piece of adhesive plaster; lay the patient on his back, and instruct him not to turn or move himself in any direction, not even to raise his legs or his

head by voluntary effort; and to administer to him, at proper intervals, perhaps one grain of solid opium, having in view the arrest of all peristaltic action, the reduction of pain, and the abatement of the nausea; all of which purposes are accomplished as well, and some of them better, by solid opium than by morphine. No cathartic remedies are proper, nor the simplest enemata; indeed, it is best to require that the patient should take nothing into his stomach, whether solid or liquid, except the opium, for the first twenty-four hours, since all these things tend to provoke that action in the bowels which is most important should be for a time completely suspended. To combat the inflammation, warm water, fomentation to the bowels, leeches, and bleeding are sometimes demanded.

There are certain exceptions to these rules which have generally been recognised.

If the walls of the abdomen are torn away by the missile in such a manner that the viscera are exposed, and an intestine is found to be wounded, then it will be proper to either close the wound in the intestine or to fasten by sutures the margins of this wound to the margins of the outer wound. The same practice ought also to be adopted in case the intestine is wounded, and at the same time protruded in the form of a hernia.

Hernial protrusions of the viscera of the belly, as the result of gunshot injuries, are not so common as are hernia the result of bayonet and other penetrating wounds. The explanation of this difference is probably to be found in the fact that extravasations of the contents of the viscera are much more frequent in the former case than in the latter. The escape of the gas, especially into the peritoneal cavity, prevents that outward or centrifugal pressure which is, no doubt, the principal cause of the hernial protrusion.

(William O'Meagher, Surgeon to the 87th N.Y. regt., reports two cases in which, balls having penetrated the intestine, the wounded portion was protruded soon after the receipt of the injury by the act of vomiting. Death took place in each case in about ten hours.—*AMERICAN MEDICAL TIMES*, Jan. 4, 1862, p. 6; April 12, 1862, p. 205.)

The same surgeon reports an extraordinary example of deflection of a conical ball within the abdominal cavity; entering through the left sacro-iliac symphysis, it had wounded the cæcum near the appendix; then impinging upon the venter of the right ilium, it had been deflected upwards, making two wounds in the transverse colon; and finally fell down between the bladder and rectum, where it was found in the autopsy. His death occurred on the sixteenth day.—*Ibid.* 205.)

If the hernia exists, and it is not complicated with a wound of the intestine, it demands the same treatment as if it was a hernia due to any other cause. In case of a recent intestinal hernia, unaccompanied with strangulation, it should be reduced promptly by careful taxis; and the efficiency of the taxis will be greatly increased by placing the patient in such a posture as to relax the abdominal muscles, and especially by complete anæsthesia. If it is strangulated, but not yet in a condition of sphacelation, no time should be lost in relieving the strangulation, and then returning it into the cavity of the abdomen. The operation will be made with the most safety by introducing into the wound a grooved director, and carrying upon this a narrow, probe-pointed bistoury. When it is practicable, the incision should be made in the direction of the fibres of the muscles, to facilitate the closure of the wound after the operation is completed. Mr. Guthrie condemns peritoneal incisions in these cases, and in cases where the omentum is protruded, on the ground that the strangulation will always be completely relieved by cutting the more superficial tissues, such as the skin, muscle, or tendinous expansions; and because, in his opinion, the danger of peritoneal inflammation will be increased in proportion to the length of the incisions made in this tissue; while it is always desirable, he thinks, to secure adhesion between the intestine or omentum on the one hand, and the perito-

neum on the other hand, as speedily as possible. With this view he recommends that the hernial protrusion shall be permitted to remain just within the wounded margins of the peritoneum, and "even rising up for the least possible distance" into the track of the wound. This advice might seem to possess value in ease the intestine itself had been wounded and returned, but in no other case, so far as I can see. Nor does my experience in operations for strangulated hernia warrant me in the belief that unless it is already adherent it could be maintained in this exact position, however carefully and accurately the external wound might be closed. This practice, demanding always a very nice application of the knife, will endanger a recurrence of the hernia in some cases, especially in gunshot injuries, when the exact closure of the external wound is more difficult than in punctured wounds; and in other cases the part which has been protruded will be at once drawn away from this point, and the end desired will not be attained. Candidly, it seems to me a somewhat dangerous and wholly useless refinement of the operation for simple strangulated hernia, and one which I cannot think it proper to recommend.

Not unfrequently the surgeon will experience some difficulty in the introduction of even so small an instrument as a grooved director between the edges of the wound and the hernia; and rather than subject the hernial protrusion to much contusion in the attempt to force the instrument down, it will be advisable to commence the incision from the surface of the skin, using for this purpose a broad, convex bistoury. This source of embarrassment is more often present in narrow, punctured wounds than in gunshot wounds.

We recognise the existence of incipient sphacelation in a strangulated intestine by its color and feel. If it is of a pink red color, or even dark brown, and feels firm under pressure, or if the blood, being expressed from its surface, speedily returns upon the removal of the pressure, it is not gangrenous, and ought to be returned into the cavity of the belly; but if it is of an ash color, or black; if it has a doughy feel, or crepitates under the finger; if the blood, being pressed out, does not return to the surface, it is probably dead, and must be allowed to remain where it is. When the evidence of its death is conclusive, it may be at once laid open, and then secured to the edges of the wound by a few delicate sutures; but in case of a doubt it would be better to cover it with lint spread with simple cerate, or with a soft, emollient poultice.

Where adhesions have already taken place, if recent and tender, they should be broken up; if old and strong, we can do nothing more than relieve the strangulation.

Omental herniæ demand certain modifications of treatment. When the omentum is recently expelled, and its condition of health is not essentially changed, it ought to be at once reduced; but if it is very much inflamed or swollen, or if it is ulcerated or in any degree sphacelated, it will be better, having relieved the strangulation, to permit it to remain, only protecting it by simple cerate or by emollient poultices, or other moist applications. Removal by the ligature is always improper, and excision ought only to be practised in case the protrusion is very large, or the omentum is much disorganized.

It has often been noticed that a piece of omentum, when strangulated, is prone to enlarge or to swell rapidly, so that it would require a very free incision of the peritoneum to effect its reduction. There is much reason to suppose, also, that the introduction of such an indurated mass into the cavity of the abdomen would act essentially as a foreign substance, and cause inflammation. I think it was Sir Astley Cooper who first recommended that, under these circumstances, although the omentum might not be ulcerated or sphacelated, it ought not to be returned, but that it should be cut off close to the point of strangulation, each artery in the omentum being carefully tied, and one end of each ligature being left hanging from the wound. He hoped by this method to insure the safety of the

patient, and, by leaving the omentum resting against the orifice, to secure adhesion and to prevent any future descent of the hernia, the omentum serving as a kind of stopper or plug to the canal. The advice given by Mr. Guthrie in reference to the treatment of an intestinal hernia, it will be remembered, is in effect the same—that is to say, he recommends also that the intestine shall be left within the lips of the peritoneal wound. With all respect for the opinions of these distinguished gentlemen, I object to this mode of procedure in either case. My reasons for this objection in case of the intestine have already been given. Mr. Cooper's suggestion I have adopted in one instance, and so far from its preventing the subsequent descent of the omentum, I am persuaded that it determined an opposite result. The portion which I removed is now in the Long Island College Museum; it is nearly the size of my fist; but as soon as the external wound had closed, the remainder of the omentum began to descend, and in a few weeks the protrusion was as large as it was before the operation.

In my opinion, it will be better, having excised the omentum and secured the vessels, to push the remnant fairly into the belly, only adopting the precaution to leave the ligatures so long that they will depend from the external wound.

Original Communications.

ON STRABISMUS.*

By HENRY D. NOYES, M.D.,

SURGEON TO THE NEW YORK EYE AND EAR INFIRMARY.

(Continued from page 244.)

ANOTHER optical condition giving rise to strabismus is hyperopia. This will require some explanation. It is one of the most interesting points in the causation of strabismus. We are indebted to Prof. DONNERS, of Utrecht, for calling attention to this condition, and its bearing upon strabismus and upon asthenopia. Hyperopia is a term substituted for hyperpresbyopia; the latter is dropped because it implies an untruth—conveying an intimation that extreme old age may be involved in the optical defect, whereas it often, if not always, is the person's heritage at birth. By hyperopia is meant insufficient refractive power; the refractive media are too weak to bring parallel rays to a focus on the retina without calling in the aid of the power of accommodation. The sure test for this is, to paralyse the accommodation by a solution of atropine, gr. iv. ad ʒi. dropped into the eye, and then to experiment upon the discernment of distant objects. A normal eye is not thus seriously embarrassed; the enlarged pupil gives some annoyance, but this may be corrected by looking through a small hole in a card. The hyperopic (or hypermetropic) eye can make little or nothing of distant objects. Put a proper convex glass before it and everything becomes clear. Put such a convex glass before a normal eye and every distant thing is indistinguishable. I may illustrate this readily by these diagrams. The hyperopic eye, in viewing distant objects, has, by the use of atropine, been discovered to be calling the power of accommodation into play, while the normal eye, under these circumstances, has no occasion for its aid. In viewing near objects, the hyperopic eye has, consequently, to make a much greater draft upon its accommodative power, that is, the ciliary muscle, than the normal eye needs. If the ciliary muscle be robust, the hyperopia induces no morbid symptoms. If the ciliary muscle be weak, or if the hyperopia be great and the ciliary muscle of only ordinary strength, trouble arises—asthenopia appears, or *strabismus*. I have spoken of hyperopia as if it were a positive force, calling it great or

* Read before the New York Academy of Medicine, March 2, 1864.

small, and worse when great; in reality it is a negative quality, a subtraction of refractive power, and the term great is really to be applied to the convex lens which is needed to make up the deficiency.

Observe, too, that hyperopia causes morbid symptoms only when the accommodation is absolutely or relatively weak. How does it cause strabismus? Because, as I have before said, the strong contraction of the internal rectus muscle procures the augmented contraction of the ciliary muscle. The associated action between convergence of the visual lines and the function of accommodation is forced to an unnatural degree; convergence is made so great as to become squint, and one eye is sacrificed for the sake of giving to the other a sufficient power of accommodation—in other words, sufficient refractive power for clear vision. This process begins usually at the age when we are required to note small things attentively, especially in learning to read. The squint at first appears only when looking at something near by. By and by the excessive contraction of the internal rectus causes its hypertrophy, the external rectus cannot antagonize it, and the internal rectus finally undergoes permanent shortening and partial fibrous degeneration. Then the strabismus is permanent, and it is usually alternating. I have, however, seen a person at 27 years, with hyperopia requiring a convex glass of seven inches focus, reading No. 2 JAGER (pearl) at five inches without glasses, but with a strong converging strabismus. The squint disappeared when she stopped reading. In such a case the external rectus muscle must increase, or, at least, fully retain its power, to be able to counterbalance the excessive contraction of its opponent.

I have seen a patient eight years old, who on one day had decided convergent strabismus, both for near and distant objects, and the next day very little; it was scarcely perceptible. She had great hyperopia, and the periodicity was a phenomenon belonging to the formation of permanent squint; the recti muscles were not yet organically shortened.

Besides hyperopia, other defects may exist at the same time. The patient employs one eye to the neglect of the other; from disuse, passive congestion of the optic nerve occurs; the retina loses its keenness of perception, and amblyopia is added to hyperopia.

Again, I have seen hyperopia combined with astigmatism. By astigmatism is meant a want of symmetry in the curvature of the cornea, or in the structure of the crystalline lens, by which the refractive power in one section or meridian is not the same as in another. For instance: in a vertical plane, the focal distance may be longer than it is in the horizontal plane. One effect of this error of structure is, that circles appear to be oval. Another, that vertical lines may be seen distinctly while horizontal lines are blurred, or *vice versa*. I have seen a family many of whom had strabismus, and of these, two had both hyperopia and astigmatism of the left eye.

The catalogue of visual defects which cause strabismus is not exhausted. Persons with myopia squint. With myopia amounting to -4 or -2 , it is rarely possible, without glasses, to converge the visual lines upon the object. The internal recti are not adequate to the task; while one eye looks, the other remains passive. If there be any actual insufficiency of the internal recti, a positive divergence results. It may finally become permanent. Another mode of production is, probably, the peculiar shape the eye-ball takes in many cases of myopia, and which makes the eye myopic. That is, as you see in these plates, a protrusion of the posterior portion of the sclerotic, either as a small tumor or as a general enlargement; technically, this is called posterior staphyloma of the sclerotic. It is distension of the eye, localized at its posterior pole, and elongating its antero-posterior axis. It follows, from this change of shape, that there must be some hindrance to the rotation of the globe by its increased projection backwards. When it is remembered how much the requisite rotation of the cornea inwards is augmented by

the extreme approximation of the point of distinct vision, this change of shape becomes no small item in the difficulty of securing binocular vision. I have seen cases where the ovoidal shape of the globes was so decided that the above explanation of divergent strabismus was undoubtedly correct.

PROF. DONDERS is very sweeping in his statement that myopia is the great cause of *divergent* squint. It does not always cause divergence. I have seen a case of conical cornea and posterior staphyloma of the left eye, the right eye being normal, in which the left eye had permanent convergence.

Strabismus is said to be produced in infants by permitting them to look a great deal at things which they cannot easily see with both eyes, because they are so far to one side, as a bright light, the fire, etc. There may be truth in this assumption, but, before it is admitted, a rigid analysis should be made of the quality of their sight.

I may remark that this analysis is possible without any information from the patient. The ophthalmoscope can determine the refractive state of the eye with an approximation to accuracy sufficient for cases of decided error.

Such are the cause of strabismus: paralysis, complete or incomplete, insufficiency of muscles, great defects of sight in one eye, inflammation of a muscle at the time the globe is inflamed, hyperopia, astigmatism, myopia, vicious habits of looking; tumors in the orbit will cause deviation of the visual axis, but such causes are not within my present scope.

Paralysis of a muscle is the loss of its power; insufficiency of a muscle an original weakness; in keratitis, or scleritis, the muscle may be inflamed; hyperopia and myopia impose on the muscles a task too heavy. In loss of sight, the authority which has sway over the muscles has been annulled. Hence strabismus.

The fact of strabismus is always evident; the visual lines are divergent or convergent. Besides converging, often one visual axis points upwards. The phenomena of motion are worth some study, and from these are derived the subdivision of strabismus into varieties.

The commonest variety is the alternating or concomitant strabismus; it may be diverging; it is generally converging. Either eye may fix upon an object at will. If you cover each eye alternately so that it cannot see your finger held up, but so that you can see it, as the other eye fixes on the finger, you find that, while the left eye fixes, the right eye squints, and while the right eye fixes, the left eye squints. The squint is greater for near than for distant objects. The associated movements are well performed; if an object be held at the right side, both eyes turn to the right, but the angle of their axes to each other is maintained. The arc of movement may be little restricted, but the centre of the arc is, in one or both eyes, transposed to the right or left of the middle of the palpebral opening. Sometimes, when an object passes to the right side, the left eye views it; when it passes to the left side, the right eye views it, each alternately converging. This implies equal vision in both, and great shortening of each internal rectus. In diverging squint a similar condition is sometimes observed; only the right eye looks at objects on the right, and the left eye at objects on the left.

Strabismus from paralysis is evidenced by the inability of one or both eyes to move in a certain direction, and in that direction double vision appears. The affected eye can fix upon an object brought within its range, and within a certain range there is correct binocular vision.

Strabismus from insufficiency of the internal recti, whether from absolute weakness or from relative deficiency, as in myopia, exhibits itself only during attention to near objects.

Strabismus from great defect of sight in one eye, is simply the want of accurate coöperation with its fellow; there is no restraint of mobility; it may be divergent or convergent. In looking at near objects, the squint may diminish if divergent, it may increase if convergent; for distant

objects it remains always the same. The blind eye is unable to fix on a given point.

I think it will now be clear that the operation for strabismus is not simply the correction of a deformity; it should, if possible, involve something higher, namely, the restoration of sight.

(To be continued.)

TWO CASES OF

EXTIRPATION OF POLYPI IN THE LARYNX.

(With Wood-cut Illustrations.)

By FRIEDRICH SEMELEDER, M.D.,

OF VIENNA.

[Translated from the Vienna Medizinal Halle, by EDWD. T. CASWELL, M.D., of Providence, R. I.]

[THE novelty of these two cases, the light they throw upon physiology, the difficulty attending the operations, and the comparatively successful results obtained, afford, I think, a sufficient reason for making them available to the majority of American practitioners. The few passages which have been omitted possess a mere local interest.—Tr.]

Laryngoscopic Surgery has realized to the utmost those expectations which, but four years ago, were considered as altogether too sanguine. With pride can we say that this result is due to the diligence of Germans; and from our school at Vienna, in particular, an impetus has gone forth in all directions. Laryngoscopy has richly fulfilled what it promised. Its most brilliant achievement is, however, the extirpation of neoplasms. Every contribution in this direction is of worth and importance.

CASE 1.—A young man of about 28 years of age, a lawyer by profession, came under my care in the spring. He had been wont to sing with great pleasure, and prided himself upon a beautiful tenor voice. For some time his voice, especially in the higher register, was slightly rough and shrill; the falsetto tones had become particularly bad. After any special exertion in singing, or in the practice of his profession, and after continued speaking without special effort, he would notice at evening an unpleasant feeling of heat, tension, and dryness in the pharynx, as well as a slight tickling and inclination to cough.

An examination of both the pharynx and the larynx showed the existence of a sub-acute catarrh of these organs. The pharynx, especially, was injected whenever the patient became somewhat worse; the mucous membrane was glossy and dry, covered with a net-work of enlarged veins, and the uvula was slightly oedematous. The entrance to the larynx, as well as the ventricular* and vocal chords, was reddened in fine streaks, some of which were at this time disappearing; the secretion of the mucous membrane was somewhat increased, and occasional small masses of a thin, yellowish mucus clung to the vocal chords. I commenced appropriate local treatment, blowing into the larynx a powder of alum and nitrate of silver, painting the pharynx with iodine combined with glycerine, and also with a solution of nitrate of silver. I at first examined with the laryngoscope daily, and then every other day—partly for the purpose of applying remedies, and partly to follow the progress of the treatment. In the course of five or six weeks the laryngeal catarrh had vanished; that of the pharynx had so much improved, that the patient considered himself well, and, contrary to my advice, renewed his singing exercises. Our satisfaction did not last long.

After a fortnight had elapsed, my patient came again to me, and said there was still something wrong about his throat. I again examined him, and to my great astonish-

ment found at the first glance a small polyp about the size of a swollen millet-seed, seated on the border of the anterior quarter of the left vocal chord (Fig. 1); its

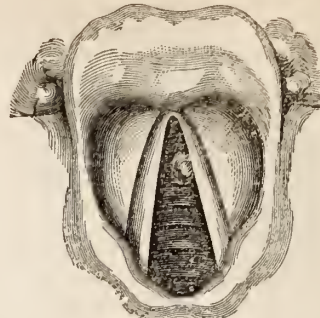


FIG. 1.

surface was covered with mucus, was pale-red, and smooth; it was not movable, perhaps indeed from its minuteness, nor did it change position during energetic inspiration and expiration, nor during the emission of sound, when, however, it became pinched in the glottis.

There were in this case two circumstances which excited my astonishment:

1st. That the patient, in spite of this formation,

could sing well; and of this I was convinced on hearing him, a few days after, render the well known church aria from Alessandro Stradella. This selection was, to be sure, very favorable for his voice; and no one, judging from the voice alone, would have supposed that the larynx was diseased, or that a neoplasm was seated upon the vocal chord. The voice seemed a little uncertain, but that could have been explained on the ground of a slight degree of embarrassment and of long interruption in practice. The falsetto voice alone was altogether bad, a circumstance which seemed peculiarly adapted to throw some light on the formation of the falsetto-register. As is well known, in spite of many deviations, the writers upon the formation of the voice have held with persistency that, in the chest voice, the vocal chords vibrate in their entire extent, i.e. on their free edge, both on the upper surface, the so-called ventricular, and on the lower or sub-glottidean surface; on the other hand, the head voice (falsetto) is produced by vibrations of the ventricular surface and of the free edge alone. It is manifest that, in our patient, the formation of the chest voice was not much interfered with, as, of three component factors, only one was wanting, while the disturbance of the falsetto voice is comprehended when we remember that, of its two factors, one—and according to many writers the more important, viz. the vibration of the free edge of the vocal chord—was wanting. Thus, it seems to me, this case affords important confirmation of the views above mentioned upon the physiology of the voice. Such observations are the more important, as they can be made but rarely. Satisfactory studies upon the formation of the voice, and especially upon the differences of register, can only be made upon practised singers; and it is a very rare coincidence that precisely such a one should have a polyp upon the vocal chord. I leave physiologists to determine the value of my conclusions in this case.

2d. I was greatly astonished that I had so often, and, as I flatter myself, so carefully examined my patient, and that then, eight weeks after my first examination, and just after a fortnight's interruption, as soon as the mirror was introduced, I should for the first time discover the existence of the polyp, and with equal readiness at nearly every subsequent examination. The choice was left me to conclude that for six weeks I had examined carelessly, or that the neoplasm had been but very recently developed. The former supposition I cannot readily allow; that I have the right to assume the latter, I cannot positively assert. The latter supposition is rendered probable from the subsequent growth of the formation. But either carries instruction with it.

The removal of a laryngeal polyp is indicated under all circumstances in this age of laryngoscopic operations, even when the polyp causes as little inconvenience as it did in the present case. I determined, therefore, to operate, and at once commenced the necessary preparations, viz. repeated introductions of the laryngeal sound in order to overcome the sensibility of the parts. I soon accomplished so much

* The author wisely rejects the nomenclature "true" and "false vocal chords," and designates the latter by the name *taschen bänder* (pocket or ventricular chords), and the former *stimm bänder* (or vocal chords). We shall follow his example.—(Tr.)

that the patient suffered no inconvenience when I lifted up the epiglottis, and, gliding down upon it, touched the polyp. This was the easiest method to bring the neoplasma into view. I postponed performing the operation, as my patient wished to make a month's tour among the mountains during September, to which I readily acceded in consideration of the apparent quiescence of the formation.

In the beginning of October we re-commenced treatment, and I gained by this delay the advantage of exhibiting the patient to my honored friend Prof. Wintrich, and of becoming acquainted with his modified *globe illumination*, which afforded me valuable assistance. In the meantime, at Wintrich's suggestion, Leiter had modified somewhat the blades of the laryngeal forceps, and produced a very useful instrument.

The operation was performed Oct. 25. [The author states that the wife of the patient was present, and aided greatly by her encouraging words in keeping the patient calm.—Tr.] Although the patient could bear perfectly well the application of the laryngeal sound, and of Bruns's epiglottis forceps, still he urgently desired the application of local anæsthesia, after my worthy colleague Türk's method, and I did not oppose his wishes. I painted with a solution of morphia and chloroform the interior of the larynx by means of a mirror and a curved camel's-hair pencil, and the pharynx with the ordinary pencil used by artists, repeating the procedure at first at intervals of a minute, and afterwards as rapidly as possible. Although this operation was exceedingly unpleasant to the patient, it was still continued until I thought I detected a diminution of sensibility, which, indeed, did not amount to complete anæsthesia. This process of painting, however, developed one new fact opposed to the general belief. An almost insupportable degree of sensitiveness might have been anticipated from such long continued mal-treatment of the epiglottis with instruments, and with such irritating fluids as chloroform and rectified spirit, but such was not the case.

When I proceeded to the operation the mucous membrane of the larynx was somewhat reddened, and the larynx itself, when the epiglottis was well elevated, presented the appearance of Fig. 1; the neoplasma had increased since I first discovered it to the size of a hemp-seed. I had determined to seize the polyp with Voltolini's guillotine.*

After frequent futile attempts I succeeded in catching the polyp in the ring, and in cutting off its free protruding half. Now the operation became so much the more difficult. Numerous attempts to catch the remnant with the guillotine signally failed. The forceps also were several times applied with no better success, and were finally thrown aside, in consequence of the weariness of all concerned, with the hope that the wounded polyp would perhaps take on retrograde action. The excised piece had been withdrawn sticking to the instrument, but it was lost; the fork had not seized it.

This operation showed me the great defect in Voltolini's instrument. It would be well to have several of these instruments differently constructed; for the prong upon the ring must stand towards the free side, otherwise there is danger of perforating the vocal chord, and of doing it far more injury than the extirpation of the polyp could do good. It was a painful experience for me twice during the operation to meet with difficulty in withdrawing the instrument. Once, as reflex action was produced by touching the vocal chord, the glottis being closed spasmodically, the prong pierced the chord, and I could only free the instrument during the next deep inspiration, for which I had to wait. Again, in drawing out the instrument, the prong seized upon the left arytenoid cartilage. Further, a single

instrument of this kind is only applicable with facility to one vocal chord; to the other it applies itself more or less obliquely, so that a protruding tumor cannot be seized exactly at its base, as in my own case: or else the operator must introduce the instrument with his left hand for the left vocal chord, a procedure which demands still greater facility of execution. The above remarks will be clearly understood, if we consider the position of the glottis in an individual sitting opposite to us. If therefore the guillotine is to prove a successful instrument, it must be so arranged that the ring shall turn in all directions. If the line $ab \overset{c}{\underset{a}{\vee}}$ represents the left, and the line ac the right

vocal chord of a patient, it is manifest that (if we have the instrument in our right hand, and the mirror in our left) we can only apply the ring equally well to the right and to the left vocal chord, in case the ring admits of the adjustment referred to. Such an arrangement of the ring, however, is incompatible with the principle of the pincette. The same is true of Bruns's scissors, which, when introduced with the right hand, may indeed be placed parallel to the line ac (the right vocal chord), but they always must stand more or less obliquely to the left vocal chord ab , thus incurring the danger of cutting the chord itself (which must by all means be avoided), or else we must practise using them with the left hand

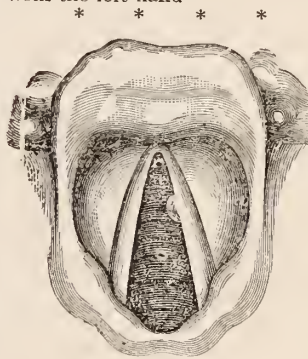


FIG. 2.

The expectation that the remnant of the polyp would shrink away of itself was not realized. The stump, however, rounded off, but still, after four weeks, preserved unaltered the form and size represented in (Fig. 2). I determined, therefore, to repeat the operation, and commenced on the 26th of November, 1863, the same preparatory course as at the first. The application of the local anæsthetic had the same partial effect. I made use of the laryngeal forceps, to be described hereafter, and, after numerous fruitless attempts, I succeeded in seizing the polyp, and in so far setting it free that it hung by only a few fibres. But this time there was to be no half-way work. When the patient uttered a continuous and half-suppressed α , I could explore the closed glottis with my forceps, and after repeated efforts I thought I had actually seized the small nodule. That the prong of the forceps had pierced it was not possible, for the body itself was too small, and I was most unpleasantly surprised not to find it clinging to the forceps or concealed in the hollow hemisphere. I seized the mirror and was about to make another attempt, and lo! there was a small lump about as large as the head of a middling-sized pin adhering to the surface of the mirror, enveloped in blood, and seeming quite compact when pressed between the fingers. It was the remnant of the neoplasma which had been thrown upon the mirror by the impulse of coughing, and had remained adhering to it. An examination showed at once that all the diseased part had been removed. The instrument had scraped away the epithelium from a large surface, especially from the left vocal chord. On both occasions the bleeding was not worth mentioning, and there was almost no reaction. At the first operation I had attempted, as I have stated above, to use the epiglottis forceps of Bruns; by these the epiglottis was several times severely pinched in spots as large as a lentil, and upon these places a yellowish exudation had been deposited. Once the forceps had seized only the mucous membrane, and a circumscribed swelling was the result. By this injury of the epiglottis I easily explained the slight difficulty in swallowing and coughing, which lasted for a couple

* This instrument, like Bruns's scissors, is modelled after Charrière's pincette, with crossed arms. Each of the curved arms carries a small cutting ring of five decimetres (millimètres?—Tr.) in diameter. On pressing together the pincette, the rings shove over each other in such a way that a body presenting in the ring, is cut off. One of the rings carries on its lower surface a small prong with an upward direction, which pierces the body to be excised, and prevents its falling down.

of days after the first operation, and, indeed, until the exudation upon the epiglottis had disappeared. The use of the morphia produced its general effects after the first operation; there was dizziness, sleepiness, headache, and nausea. No unpleasant effects, however, followed its use in the second case. A few days after, the epithelium had been entirely restored, and the slight injection and swelling upon the place of the operation had vanished. At present I cannot recognise, with any certainty, the spot where the polyp was seated.

The removed nodule was submitted to Dr. Schott (Rokitsky's first assistant—Tr.) for microscopic examination, and was found to consist of areolar tissue with large loops of vessels and of epithelium.

The patient's head was slightly held by a trustworthy assistant in both operations. For illumination I used a petroleum lamp with Wintrich's globe, and an operating spectacle with a concave mirror of nine centimètres diameter, and of eighteen centimètres focus.

I learn with much pleasure that my patient has at last gathered courage to sing again, and that his voice has been found, by professional judges, to be as good as before the existence of the disease. The catarrh of the pharynx no longer exists. I do not desire to make the latter fact altogether dependent upon the operation, but some experience inclines me still to give due regard to this circumstance. The falsetto voice of my patient before the malady extended from F of the upper line up to B above, inclusive; these tones were lost during the existence of the polyp. Above B he could, both before and during the existence of the disease, make sounds, but they had no musical value. At present, five weeks after the operation, *the falsetto tones which were lost during the sickness are completely restored.*

(To be Continued.)

OCURRENCE OF

INFLAMMATION OF THE BOWELS AND BRONCHITIS

AS SEQUELÆ TO MEASLES,

By J. B. BELLANGÉE, SURG., U.S. VOLS.,

IN CHARGE OF MANSFIELD GENERAL HOSPITAL.

DURING the latter part of January we received from the U.S. Transport Steamer Spaulding, some seven cases of measles, new recruits belonging to the 9th Regt. Vt. Vols., garrisoning the post at Newport Barracks, ten miles above us on the railroad to Newbern. The disease had made its appearance in their camp before leaving home, and the eruption was fully developed when they entered this hospital. On the 3d day of February the post at Newport Barracks was attacked by the rebels in force; the sick, to the number of some thirty, were immediately sent to this hospital, seventeen of them being affected with rubeola, all belonging to the same class of new recruits mentioned above; disease attacking them after reaching their camp. From two to three a day were received from the same source; also a few from the 2d Regt. Mass. Heavy Artillery at this place, who had also been receiving recruits from the North, until the whole number in hospital amounted to thirty-nine. All did well until about the 16th day of Feb., when the weather suddenly changed from 60° to 18° above zero, with a cold, chilly wind from the N.W. Unfortunately, just at this time our supply of wood gave out, and the recent raid of the rebels made it impossible for the Quartermaster to furnish us with a new requisition before the patients had suffered considerably from the effects of the cold. The eruption at this time had disappeared from most of the cases under treatment. The bad effects of the sudden change of temperature were soon apparent; a dry, husky voice and distressing cough were the first symptoms; soon diarrhoea made its appearance, followed in a few days by bloody discharges from the bowels; in quite a number the evacuations were very frequent, and the poor fellows sank rapidly; great irritability of the stomach was shown

in all the bad cases, rejecting all nourishment, even the small quantities of brandy and water that were given them to support the flagging strength; erysipelas showed itself upon the face of some of the worst affected, and spread over the nose, cheeks, and ears; in one case it showed itself upon the arm and hand; that upon the hand seemed of a phlegmonous nature, with a tendency to suppuration. Of the thirty-nine affected, eight died; sixteen of inflammation of the bowels, one of acute bronchitis, and one of sudden congestion of the lungs. It is worthy of remark, that in the cases where the bronchial membranes were affected, the bowels were not much disturbed. Post-mortem examinations were made in all the cases. The pathological appearances were decided, and well marked in all the fatal cases examined. After the nature and extent of the disease were determined by our first autopsy, the treatment was reduced to supporting the system, and using opium both by the mouth and per rectum; but so greatly was the whole mucous membrane of the alimentary tract inflamed, that little was absorbed, and large doses frequently repeated produced but slight effect either in quieting the excessive action of the bowels or contracting the pupil. These cases were under the immediate care of my able assistants, Doctors N. Nickerson and L. Heard, who gave them very close attention, and have furnished me with full notes; a brief synopsis of two will explain them all, and may not be uninteresting.

Private D. R. Bruce, Co. F, 9th Regt. Vt. Vols., a new recruit, æt. 24, sanguine temperament, good constitution, temperate, was admitted to Mansfield General Hospital Feb. 2d, 1864, for measles, contracted at Brattleboro, Vt. He passed through the disease with no medication save an occasional cathartic, and was rapidly convalescing, when, on the 17th of February, after an unusually cold night, I found him presenting the following symptoms: frequent alvine evacuations of a muco-purulent character, mixed with florid blood, attended by pain and extreme tenderness over the lower part of the abdomen; a quick, full pulse, and a brown coat upon the tongue. Prescribed: Chalk mixt. $\frac{3}{4}$ ss.; laudanum, gtt. xxx. once in three hours, with hot applications to the bowels, and a carefully selected diet. This was continued until the 21st, the symptoms remaining nearly the same, when the case assumed a more serious character. The bowels were now tympanitic and tender; the evacuations occurring every hour, very small, and composed of altered blood and pus; the strength, however, was good; the tongue beginning to become dry; the pulse 120, not small; thirst and anorexia. Upon consultation, he received R. Sulph. magnes. gr. x.; sulph. morphiae gr. $\frac{1}{4}$; acid. sulph. arom. gtt. x.; aquæ puræ $\frac{3}{4}$ ss. Mix. Every two hours. Brandy $\frac{3}{4}$ ss. every two hours. He was also given, after each movement of the bowels, an injection of laudanum and starch. Feb. 23d.—Patient has been nearly the same; is becoming emaciated. Pulse 120, soft and smaller; stomach irritable. R. Pulv. opii gr. ii.; sulph. zinci gr. i.; strychniæ gr. $\frac{1}{15}$. Mix. 1 pill every two hours. Continued the brandy and injections as before. Milk punch, etc., *ad libitum*. This treatment was continued until the 28th, varying it according to the endurance of the stomach, which was becoming very irritable, and for a day at a time rejected everything introduced. The general symptoms had taken a decided downward course for several days, and during the last day or two erysipelas appeared on the cheeks, spreading over the nose, and upwards to the forehead. The dejections were now very frequent, scanty, and composed almost entirely of florid blood; the abdomen not excessively painful, though tympanitic; the pulse small; tongue dry; the surface bathed in a profuse perspiration, and the extremities cold. Yet the general strength was sufficient to enable him to help himself to stand alone, and his voice was of moderate force. On the 28th, on a full consultation, it was decided to give him turpentine as a general stimulant, to suspend the pill, to continue the brandy and the injection; the latter, however, was soon discontinued, as it could not be retained even in

the smallest quantity, and in fact never could be passed over one inch from the muzzle of the injection-tube. March 1st.—The erysipelas seems to have run its course, confining itself to the face, and the skin is now desquamating. He complains less of pain; does not have as frequent discharges, but the vomiting is more troublesome, the voice weaker, and the general appearance of the man is of extreme asthenia. March 4th.—Died at 3 P.M. Mind clear to the last. Not much pain for several days.

Secio Cadaveris, twelve hours after death.—Much emaciation. Thorax.—Lungs healthy, except a degree of hypostatic pneumonia in the posterior and lower part of each lung. No effusion in the pleura. Heart normal in size and appearance; an ounce of effusion in the pericardium; large thrombi filling both ventricles, and running into the pulmonary artery. Abdomen.—Liver and pancreas healthy in appearance and size. Stomach very much congested, and towards the pyloric end inflamed, and the mucous coat soft and of a dark color. Gall-bladder distended. Small intestines presenting signs of congestion throughout their whole extent, the lower portion being softened, and of a dark-brown color; no enlargement of Peyer's glands. The omentum congested in all its vessels.

Large intestines.—The rectum inflamed, ulcerated, thickened; the other portions merely congested.

Kidneys and bladder normal in size and appearance.

Private W. F. Palmer, of Co. C, 2d Regt. Mass. Vols., aged 16 years; light complexion, brown hair, blue eyes, and of temperate habits, was attacked with measles about the 27th of January, 1864, with which he was admitted into Mansfield General Hospital. The disease was of mild character, and ran its usual regular course without complications of any kind. At the end of two weeks, after having recovered from the measles, he was assigned to light duty about the ward, and assisted in keeping things clean and attending upon the patients. He continued to serve in this capacity till the 3d of March, when he was suddenly taken with dysenteric discharges from the bowels, for which he got, on the 4th, a saline mixture in $\frac{3}{4}$ ss. doses, and also whiskey in the same quantity, both repeated every two hours. On the 5th the saline mixture was omitted, and in addition to the whiskey he was put upon the following:—R. Pulv. opii 3 ss.; sulph. zinc. grs. xv.; strychninæ gr. i. Misce. Fiat mass. in pil. xv. dividenda. One every two hours, alternating with the whiskey. There was a decidedly asthenic condition of the system manifested by the non-resistance of the pulse, which varied from 110 to 120 per minute; great muscular debility and coolness of the extremities. Dejections muco-sanguineous, and attended with considerable pain; tongue but slightly coated, and moist; moderate tenesmus. March 7th.—Much the same; opium having taken some effect, indicated by the contracted pupil, and less pain. Omitted the above, and gave R. Pulv. opii, quiniæ sulph. ââ âi .; pulv. g. acaciæ grs. x. M. ft. pil. x. One to be given every two or three hours, according to the frequency of the alvine evacuations. Milk-punch ordered to be given in liberal quantities, and frequently repeated. Beef-tea, milk-gruel, and other nutriment to be taken as the stomach would tolerate. March 11th.—Up to the present time the patient has been kept well under the influence of the opium, which influence has, in a measure, been produced by the use of injections of starch and laudanum, administered several times during the last thirty-six hours. For the last twenty-four hours there has been nothing ejected except small quantities of mucus, slightly tinged with blood. Tongue clean and moist; pupils contracted from the effects of the opium; pulse 140, small and weak; skin moist, and of natural temperature. Abdomen much flattened, with but little tenderness on pressure. Continue medicines, with an increased quantity of stimulants, which are more frequently repeated, and all the nourishment the stomach will bear. Opium omitted at noon to-day. At 3 P.M. profuse perspiration broke out. Skin greatly relaxed; pulse hardly perceptible at the wrist; cadaverous expres-

sion of countenance; much difficulty of deglutition. Died at half-past 8.

Autopsy—sixteen hours after death.—Thorax.—No effusion in either pleural cavity. Firm and somewhat extensive old pleuritic adhesions of the upper and posterior part of right lung; both lungs otherwise healthy. No evidence of recent pleuritis. Heart.—Amount of fluid in pericardium normal. Heart appears natural, except flabby and relaxed. Fibrinous clots in right ventricle, none in left. Abdomen.—Liver normal in size and healthy in appearance. Gall-bladder full of dark-colored bile. Spleen in all respects apparently healthy. Stomach contained half a pint of dark-colored grumous-looking fluid; the mucous membrane, of at least one-third of its entire extent and of the pyloric end, was found to be minutely injected and inflamed, some patches of which were of a very dark color, and considerably softened. Small intestines.—Six inches of the first part of the duodenum highly injected and inflamed. The remainder of this intestine and the whole of the jejunum nearly healthy in appearance, but the mucous structure of the whole of the ilium was inflamed, and some twelve inches or so of its lower portion were of a very dark color, much softened and in a manner disorganized. The lining membrane of the colon throughout its whole extent was much inflamed, thickened, and softened; it easily slipped off by moderate pressure of the fingers. Kidneys.—Normal in size and appearance.

Remarks.—The other cases examined were all of the same nature, more or less of the whole alimentary track greatly inflamed, the mucous coat being of a dark slaty color and easily removed with the finger-nail. The fatal termination of so many cases leads me to query—Could anything more or better have been done? In one case only did the opium seem to affect the system, and that, like the others, died. Would blisters over the abdomen and stomach have assisted in the cure? Perhaps some one of the many Army Surgeons may have encountered a similar epidemic with a more favorable result, and may be induced by these remarks to give his experience and treatment to the readers of the "MEDICAL TIMES."

MORRHEAD CITY, N. C.

Reports of Hospitals.

U.S. GENERAL HOSPITAL, CHRISTIAN STREET, PHILADELPHIA.

REPORT ON REFLEX PARALYSIS.*

By S. WEIR MITCHELL, M.D.; GEO. R. MORRHOUSE, M.D.; AND WM. W. KEEN, JR., M.D.

SINCE the establishment, in May, 1863, of a special hospital for the treatment of diseases and injuries of the nervous system, a vast number of cases of gunshot and other injuries of nerves have been studied by the authors of this paper. The great mass of these will be considered in a future essay upon the history, results, and treatment of gunshot wounds of nerves. We have judged it wise, however, to report separately a class of very infrequent cases, in which paralysis of a remote part or parts has been occasioned by a gunshot wound of some prominent nerve, or of some part of the body which is richly supplied with nerve branches of secondary size and importance. So far as we are aware, the Medical Histories which we are about to record, stand alone as the first reports of sudden reflex paralysis from mechanical injuries. How they differ

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C. March 10, 1864. }

* CIRCULAR, No. 8.—The following paper on Reflex Paralysis, the result of gunshot wounds, founded chiefly upon cases observed in the U.S. General Hospital, Christian street, Philadelphia, by S. WEIR MITCHELL, M.D., GEORGE R. MORRHOUSE, M.D., and WILLIAM W. KEEN, JR., M.D., is published for the information of Medical Officers, in the belief that immediate and practical benefit may be derived from it.

JOS. K. BARNES,

Acting Surgeon-General.

from the paralytic affections which result from disease of organs, and which have been so ably treated of by numerous authors, we shall presently consider. That they have thus far escaped notice may be easily accounted for. In the first place they are rare; among some sixty or more carefully studied instances of wounds of nerves, we have met with only seven cases of reflex paralysis of remote organs, in which the influence was prolonged or severe. In the majority of cases, the reflex effect is either very slight or very transient, and, for one or both of these reasons, unlikely to attract notice from surgeons on the battle-field or in Division or Corps hospitals, where their brains and hands are taxed to the utmost by the palpable misery of wounds in the early stages of treatment. Had it been otherwise, we do not doubt that numerous cases of reflex paralysis from injuries to nerves would have been recorded.

The various effects produced upon the nervous system by gunshot wounds have received, it seems to us, far less attention and far less study than their interest and importance appear to call for. Among them are some which must clearly be classified with the results illustrated by the cases reported in this paper; but there are also others which are far more numerous, in fact very common, and which are signally exemplified on every battle-field. These have been more or less vaguely treated of as shock, commotion, stupor, etc. The larger part of those who receive flesh wounds involving no important organ, are but little affected at the time, or may even be unconscious of having been hit, and at all events exhibit no well marked immediate constitutional disturbance. In other cases, and particularly in wounds of graver nature, the patient instantly falls senseless, and so remains during a few minutes or many hours, reviving again either completely, or suffering from a continued state of depression known as the result of shock, and marked by the usual features of great weakness, feeble circulation, pallor, etc. In other cases these last named symptoms come on at once, and without the intervention or accompaniment of unconsciousness. These very interesting states of system may be due, it seems to us, either to an arrest or enfeeblement of the heart's action through the mediation of the medulla oblongata and the pneumogastric nerves, or to a general functional paralysis of the nerve centres, both spinal and cerebral, or finally to a combination of both causes. Arrest of the heart movements is producible, as is now well known, by any violent irritant directly addressed to the trunks of the pneumogastric nerves, or to the medulla oblongata, and it is conceivable that such an effect may be brought about by any very severe injury of an external part. In fact, it has long been known that the sudden crushing of a limb in inferior animals will stop the heart or make it act slowly for a greater or less length of time. Now if we add to this M. Bernard's experiments, in which he showed that irritation of the posterior roots of spinal nerves suddenly checks the cardiac motions for a time, and that like irritation of the anterior or motor roots gives rise to no such result, we shall be able to see how it is possible that a gunshot wound of a large limb may be competent to effect a like result. We should remember, too, that in nearly all of these cases the hæmorrhage from large vessels, such as are usually opened by accidents of this nature, is sufficient, even during syncope, to add to or deepen, so to speak, the effects of the reflected nerve impression. Where small vessels only have been wounded this might not occur, but it is proper to state that men who have fallen senseless at the instant of the wound, frequently awaken after a time to find themselves drenched with blood. Supposing such an arrest of the heart movements to have taken place, a continuance of their stoppage, even for a brief period, would naturally give rise to cerebral anæmia, pallor, unconsciousness, and the remaining phenomena of shock.

Again, as we have said, a severe injury, as a gunshot wound of a limb or the neck, may produce its effects of unconsciousness and loss of power, by greatly weakening or for a time destroying with various degrees of complete-

ness, the functions of all the nerve centres, and of their conducting cords. The influence of shock in thus causing temporary paralysis of nerve trunks is very well known to every experimenting biologist. Thus, after opening the spinal cavity, it is very common to discover that the sensitive nerves are for a time unimpressible by stimuli. But, as a general thing, this is not so as regards the nerve centres within the skull, which are rarely so disturbed by the operation of uncovering them as to refuse all reply to irritations. The majority of physicians will no doubt be disposed to attribute the chief share in the phenomena of shock in its various forms to the indirect influence exerted upon and through the heart. There are, however, certain facts, which, duly considered, will, we think, lead us to suppose that in many cases the phenomena in question may be due to a temporary paralysis of the whole range of nerve centres, and that among these phenomena the cardiac feebleness may play a large part, and be itself induced by the state of the regulating nerve centres of the great circulatory organ. The loss of consciousness, and the appearance of a state outwardly resembling syncope, prevent us in most cases from feeling sure that the great nerve centres suffer loss of function primarily and not through want of nutrition from feeble or arrested heart action. But there do exist certain cases, more rare it is true, in which singular affections of the nerve centres, other than those of the heart, occur as a consequence of wounds. These are well described by L'Egouest, in his *Surgery of the Crimean War*, page 219, and, in somewhat varied shapes, must have been seen by all who are familiar with the early history of gunshot wounds. The patients to whom we refer do not fall when struck, but become insanely excited or almost hysterical. The author above alluded to supposes that this form of nervous excitement occurs chiefly among those who are already excited by immediate conflict and who are actively engaged. One well known instance has been related to one of the authors of this paper as having taken place in the Mexican War in 1846. An officer of well known courage was wounded in the heel, and was thrown at once into a state of alarm, which caused him to exhibit signs of the utmost trepidation. His character for courage was such that the favorable verdict of a subsequent Court of Inquiry was scarcely needed. No cases, such as the above, or such as L'Egouest has related, have been met with by us, so that they must be of very exceptional occurrence; yet as they show the possibility of cerebral disturbance, without preceding or accompanying feebleness of the heart, it is enough to prove that they do now and then take place.

We are tempted to add the following case as a still better proof that cerebral disturbance, the result of a shock other than traumatic, may give rise to the most profound prostration, without any prolonged continuance of cardiac weakness: A well known apothecary in Philadelphia was making a mixture of certain medicines in a large mortar, when they exploded with such violence as to break the windows of the store, crack bottles and jars, and deeply indent the board on which stood the mortar. Both he and his assistant were thrown down. Both suffered rupture of the tympanic membrane of the right and left ears. The assistant felt no marked constitutional effects, and got well with good hearing, but with a constant buzzing in the left ear. The apothecary himself, of a more nervous temperament, and, perhaps, also because he was standing nearer to the point of explosion, was, he thinks, insensible for a moment. When seen by one of us a few minutes later, he was lying on a bed, with a pulse of rather remarkable strength, but now and then losing a pulsation, and altogether irregular as to rhythm, beating seventy one minute, and eighty the next. His manner was excited and hysterical. He talked incessantly, and his limbs were in continual agitation, with occasional twitching of the facial muscles. The tympanic membrane was split across in his left ear, and on the right side presented a triangular opening. He had no headache, but complained of the roaring,

hissing, etc., which seemed to be sources of the utmost annoyance. Despite his desire to move about, his muscles were extremely feeble, and for twenty-four hours he was unable to walk without aid. He recovered readily; both membranes healing completely, and his hearing none the worse for the accident.

(To be Continued.)

Progress of Medical Science.

THE AMERICAN JOURNAL OF MEDICAL SCIENCES.

The leading article in the April number of this journal is by J. Forsyth Meigs, M.D., etc., of Philadelphia, on *Heart-Clot as a Cause of Death in Diphtheria*.—Dr. Meigs believes that thrombi are something more than post-mortem clots, and reports three interesting cases of diphtheria in which he regards their formation as ante-mortem, and the direct cause of death. The three cases occurring in his own practice lead him to the belief that the cases of sudden and unexpected death, taking place during apparent convalescence from diphtheria, and supposed to be the result of exhaustion or syncope, are examples of the kind he has described. In suggesting a cause of the coagulations, he refers to an opinion expressed a number of years ago by his father, Dr. Charles D. Meigs, concerning "the accidental formation of heart-clots in parturient women, as a result of syncopal conditions occurring in subjects who had already lost blood by hæmorrhage during or after labor," supposing the loss of blood to increase the coagulability of what remains in the system by the slow movements of the heart during the fainting condition. He believes, however, that in cases similar to those he reports, "some peculiar change takes place in the constitution of the fluids or tissues more or less akin to that which gives rise to the exudation of the diphtheritic deposit on the mucus surfaces, which does, in certain instances, by an analogous power or action, induce the formation of coagula upon the interior structures of the cardiac cavities." As we are entirely ignorant of the particular variety of the disease in which we should anticipate the formation of these clots, the only directions for their prevention that can be given are, to make use of every effort to get rid of the disease as rapidly as possible. In regard to the question of recovery after a coagulum has formed in the heart, the author is disposed to hope that in some rare instances nature may be able to effect a cure. In one of the cases reported an effort of this kind was being made, as shown by the irregular and broken appearance of the clot, indicating a process of slow disintegration. This is in accordance with M. VIRCHOW's theory of the disintegration of thrombi formed in the large vessels; that they undergo a softening process from the centre outwards, which reduces them to "a puriform but not purulent substance," and the minute particles conveyed into the small vessels.

II.—*Neuralgic Affections following Injuries of Nerves*. By J. MASON WARREN, M.D., Surgeon to the Massachusetts General Hospital.—The rational treatment of these affections, Dr. Warren regards as based on the fact that their natural tendency is to recover, if we can keep the patient comfortable during the time necessary for recovery to take place, either by division of the nerve, or by the general or local use of narcotics, of which the hypodermic injections of morphia have the preference. He reports several cases occurring in his practice, in which the injury seemed to have been in the tissues surrounding the nervous trunk rather than the trunk itself. In one of these cases the nerve was firmly glued to the surrounding tissues. These adhesions being separated, perfect relief from pain followed, which, however, returned in a diminished degree when cicatrization again commenced. The pain was then controlled for six months by the daily use of hypodermic

injections of morphia. Other cases illustrate the powerful effect of these injections, not only in relieving the pain, but in actually curing it.

III.—*Surgical Notes of Cases of Gunshot Injuries occurring during the Advance of the Army of the Cumberland in the Summer of 1863*. By J. MOSES, M.D., Surgeon U.S.V., Medical Director.—These cases are arranged in a tabular form, and some of the most interesting are described somewhat in detail. When gangrene appeared, it was generally arrested by the application of escharotics. Nitric acid, bromine, and the persulphate of iron were all used with advantage; but bromine seemed best adapted to the greatest number of cases. Its application, though painful, should be thorough, even to the sound tissue after the slough is carefully separated. Generous diet, stimulants, etc., should not be neglected. Conservative surgery was as far as possible adopted, and generally with good results.

IV.—*A Description of some Instances of the Passage of Nerves across the Middle Line of the Body*. By JEFFRIES WYMAN, M.D., Hersey Prof. of Anatomy in Harvard College.

V.—*On the Disease produced by the Trichinia Spiralis*. By WILLIAM KELLER, M.D., of Darmstadt, formerly of Philadelphia.—An interesting historical and descriptive account of this disease. But as the subject has been recently presented to our readers, we shall not attempt any synopsis of this article.

VI.—*On the Major Amputations for Injuries in both Civil and Military Practice*. By JOHN A. LIDELL, M.D., Surg. U.S.V., in charge of Staunton Hospital, Washington, D.C.—In this article Dr. Lidell advocates the practice of primary amputations, and gives many strong reasons for the support of his views.

VII.—*Report of Cases of Hospital Gangrene treated in Douglass Hospital, Washington, D.C.* By WILLIAM THOMPSON, M.D., Assist. Surg., U.S.A.—This disease was generated by want of pure air, and of strict police, and an unscientific method of dressing the wounds, rancid ointments being used instead of the ordinary water dressing. By strict attention to cleanliness, improved diet, and careful dressing, the epidemic was checked. There were two grades of the disease, one mild and characterized by ulceration of the tissues, the other rapid in its course, fatal, and distinguished by sphacelus of the invaded tissue. In treatment a nourishing diet with tonics and stimulants was found to overpower the feeble digestive organs, causing vomiting and diarrhoea. Hydrochloric acid grt. iv. and tinct. opii grt. xvi. were then given every three hours, when the tongue became moist and clean, and the appetite returned sufficient to cause the patient to ask for and enjoy his food. The local treatment was at first the nitric acid, followed by an antiseptic wash. A solution of bromine in water was afterwards used, and found successful when nitric acid had failed.

VIII.—*Observations upon One Hundred Cases of Intermittent Fever, in which the Sulphate of Cinchonia was used as a Substitute for Quinia*. By A. PAUL TURNER, M.D., one of the Physicians to the Howard Hospital and Infirmary for Incurables.—Of the cases as reported, 79 per cent. did not present a single paroxysm after the treatment commenced. The others, with one exception, recovered after from one to three paroxysms. The smallest quantity given during a single intermission was five grains to a child two years of age, in doses of one and a half grains every hour, preceded by a mild cathartic of hydrarg. cum creta. The maximum quantity given during a single intermission was thirty grains to a female aged thirty years, in doses of five grains every two hours. The largest dose given at one time was fifteen grains to a stout man, in whom the paroxysms were of unusual severity. After a brisk purgative the above dose, suspended in tinct. lavand. co. was given three hours before the expected paroxysm, which did not return. It was generally administered in solution with some mineral acid, or with tinct. ferri chlor. U. S. P. Nausea and vomiting followed its use in five

cases, and cephalalgia in six cases. As an antiperiodic he considers it fully equal to quinia.

IX.—*Miasmatic Typhoid Fever.* By JAMES LEVICK, M.D., one of the Physicians to Pennsylvania Hospital.—In this paper the writer describes typhoid fever as sometimes associated with symptoms of well marked miasmatic remittent fever, characterized by suddenness of attack, intense pain in the head and back of the neck, periodical remissions and exacerbations, and its amenability to quinine.

X.—*Loss (Hysterical) of Speech and Hearing successfully treated by the Inhalation of Ether.*—Reported by JAMES H. HUTCHINSON, M.D., one of the Physicians to the Episcopal Hospital.

Cerebro-Spinal Meningitis. By A. P. MORRILL, M.D., of Memphis, Tenn.—A short account of the disease, as it appeared among the negroes brought to Memphis by the Federal army in 1862. The only treatment from which he derived any benefit was the tincture of aconite, in such doses as to produce some degree of toxic effect, repeated every three hours, and its continuance for three or four days, with an occasional dose of calomel, and strong liniment to the spine.

XI.—*Case of Pott's Abscess of the Brain—Trephining—Necrosis and Removal of the Right Parietal and Part of the Frontal Bones—Recovery.*—Reported by H. RAPHAEL, M.D., House Surgeon, Bellevue Hospital.

XII.—*Two Successful Cases of Ovariectomy performed by A. DUNLAP, M.D., of Springfield, Ohio.* Reported by J. C. REEVE, M.D., Dayton, Ohio.—Dr. Dunlap has operated upon nineteen cases, with a result of fifteen recoveries. The cause of death in one of the four fatal cases was hæmorrhage; in one, peritoneal inflammation; in one, congestion of the brain on the seventh day; and in one debility on the tenth day. This compares very favorably with the published statistics of the best European operators.

American Medical Times.

SATURDAY, MAY 28, 1864.

PRESCRIPTION WRITING.

THE recent case of death at Yorkville in consequence of a mistake in compounding a prescription, to which we have already alluded in our editorial columns, and to which the correspondence of Dr. STUDLEY, published in our last issue relates, should arrest attention. It is probable that the prescription, in this instance, was as legible as the penmanship of New York physicians ordinarily is, and that the druggist was the censurable party in the main; but the fact that, in the present mode of prescribing mistakes similar to that at Yorkville not unfrequently occur, sometimes producing the most melancholy consequences, should lead the profession to inquire whether there is not some remedy or some safeguard against this evil. Only a few years ago, at one of the best known and best patronized drug stores in Broadway, the clerk "put up" antim. tart. in place of antim. pulv., and as a consequence an interesting child with scarlet fever was vomited to death. At another store, powders containing poisonous doses of opium were dispensed, and the druggist, culpably remiss, gave no warning, so that the victim, an infant, was narcotized beyond recovery. Again, a liniment containing the most poisonous ingredients was administered to a child, through the fault of a physician or druggist, or both, and immediate death was the result. These cases, among others, have been made public through the city prints, and almost every phy-

sician in general practice is aware of instances which have fallen under his own observation, but which few knew beyond the circle of those immediately interested, in which the lives of patients were hazarded, even if they were not lost by similar mistakes.

Aside from the danger which attends the administration of a wrongly prepared medicine, the effect of such mistakes is very bad, particularly as regards public opinion. Probably the proportion of these mistakes to the number of prescriptions dispensed is not greater than one to five hundred, yet in consequence of the publicity given to some of them, a widespread fear, a distrust of the present system of prescribing and dispensing, pervades all classes of the community. How often does the physician find that the medicine which he ordered the day before has not been given, or has been given in reduced doses and at long intervals, through the fear that it was improperly prepared, and this, too, when it is very important, in order to arrest or control the disease, that the remedy should be given regularly? How often, too, do we hear the wish expressed, through fear of these mistakes, that physicians would carry medicines with them, as is done in the country, or in smaller cities, or as was customary in New York in olden times? No doubt, the dread of being poisoned or injured by incorrectly prepared medicines operates as an inducement to the employment of irregular practitioners, who provide their own remedies; and yet, with proper care on the part of physician and druggist, and a proper relation between the two, the system of written prescriptions is as safe as any; since although there are two to make mistakes, there are also two to detect them.

We purpose to mention some particulars, by attention to which on the part of physicians, the number of deplorable cases of fatal errors will be materially diminished. We trust enough has been said in our former article in reference to the miserable specimens of penmanship which can be seen at any of our retail drug stores. Druggists are often puzzled with prescriptions coming from men eminent in the profession, prescriptions more resembling Egyptian hieroglyphics or the queer marks of a phonographer than the writings of educated men. For such penmanship there can be no excuse.

There is another particular in which physicians are even more reprehensible, for it is the result of gross carelessness. There are many physicians in this city in large practice who rarely write the directions on prescriptions, or even the doses. The directions are given to the friends at home, who in their grief or excitement frequently forget what is said, and as the druggist cannot enlighten them, the medicines are very likely improperly administered. It is so easy a matter to write full directions on prescriptions, and thereby prevent much mischief, that any practitioner is censurable who neglects to do so.

There is the greatest liability to mistake in the administration of medicines in those cases where several are sick in a family at the same time, as often occurs when contagious diseases are prevalent. The medicine designed for one may be given to another. The German physicians avoid this risk by writing the name of the patient on the prescription, which is transferred to the label on the bottle. It would be well if all physicians would do the same. The physician cannot justify himself by saying, that if such mistakes are made it is not his fault, but the fault of the family. It is his duty to remove, as far as pos-

sible, the liability to mistakes, whether on the part of the druggist or the friends of the patient.

Let him not only write plainly, but if necessary use the vulgar terms rather than the classic, if thereby he can avoid the danger of error.

VOLUNTEER SURGICAL AID.

THERE have been several occasions, during the progress of the present war, when the emergency created by great battles has demanded a large force of volunteer surgeons from civil life. After the second Bull Run, Antietam, and Gettysburg battles, the calls made upon the country for immediate temporary aid were promptly responded to by large numbers. The need of supplementary aid is created by the immediate advance of our forces after a great battle, or the removal of the wounded from the field to a dépôt unprovided with organized hospitals. In either case the wounded would remain temporarily without surgical aid were there not some reserve force to meet the emergency; for the surgeons in the army are compelled to remain with their commands, and there is no adequate corps disengaged.

Hitherto the call of Government for voluntary aid has resulted in an indiscriminate rush of medical men to the field, all doubtless animated by patriotic and philanthropic motives, but not all equally qualified to give the required aid. Many and serious were the complaints made against the conduct of the volunteer surgeons after the battles of Antietam and Gettysburg. It was alleged that they were incompetent, that they were negligent of the duties assigned to them, and that they visited the field from curiosity rather than from a desire to serve the wounded. That many of these accusations were true we have no doubt, and we are not surprised that the volunteer surgeon fell into disrepute.

To remedy this evil and still furnish the required aid, we advocated the adoption of the following plan:—Let the SURGEON-GENERAL of the United States invite the SURGEON-GENERALS of the different States to select a given number of reputable surgeons, who shall, when required, go to the designated place on temporary service. These surgeons shall receive the pay of a surgeon of volunteers during their term of service, with transportation. Each surgeon shall be entitled to five assistants, who shall each receive the pay of Act. Assist. Surgeons. If this plan were fully carried out, only the most responsible and best qualified surgeons would go to the field, and each would have a sufficient number of assistants to organize and administer effectively a hospital for 200 or 300 patients.

This plan was adopted only in part. The State Surgeon-Generals were authorized to issue State Commissions to a given number of surgeons, who were to be placed on the same footing as Act.-Assist. Surgeons, having no rank and a minimum amount of pay. It is evident that this arrangement is but a slight improvement upon the former. It will not command the best surgical aid of the country. Surgeons of high standing will, it is true, respond to the call from a sense of duty, but they must be few in number and their term of service will be brief. The recent demonstration of volunteers at Fredericksburg, Va., illustrates well the importance of the system which we have proposed. The brief period of a week or four or five thousand wounded men were brought to that city, where there were but few surgeons to care for them. The number

of surgeons who volunteered to give aid was far too small, and those who went forward were not accompanied by the proper number of assistants. As a consequence surgeons had to devote time to hospital details, and to slight dressings, that ought to have been given to the severely wounded. We believe that twelve surgeons, with a proper number of expert dressers selected by themselves, would have accomplished far more than the retinue of medical men and irresponsible nurses who visited the town.

Reviews.

RATIONAL MEDICINE: ITS PAST AND PRESENT: ITS TRUE RELATIONS TO SPECIALISTS, TO THE PARTISANS OF EXCLUSIVE SYSTEMS, AND TO EMPIRICS. By TIMOTHY CHILDS, M.D., of Pittsfield.

THIS pamphlet, read at the annual meeting of the Massachusetts Medical Society, May 19, 1859, contains a brief but eloquent review of the history of medicine, with the improvements recently made in its various branches; compares the present condition of the science with the past; points out with careful discrimination how and to what extent the cultivation of specialties should be encouraged; shows the fallacy of the numerical method; and deals ably and severely with that fascinating, yet most consummate of all quackery, homœopathy.

MEDICAL LOGIC: An Introductory Lecture to the Medical Department of the University of Michigan, Session of 1863-64. By S. G. ARMOR, M.D., Professor of the Institutes of Medicine and Materia Medica.

TRUE medical logic consists in the inductive method of reasoning; and hence the progress of the science must be necessarily slow. Well observed and carefully studied facts form the only true guide for the medical logician. It is by departing from this course, and adopting ideas instead of facts for our data, that we become theoretical and visionary, sectional and narrow-minded.

DEATH: ITS ECONOMY AND BENEFICENCE. An Address delivered before the Medical Class of the University of Vermont, Tuesday Evening, June 9, 1863. By HENRY M. SEELY, M.D.

AN interesting essay on the necessity of death for the support of life. Beginning with the solid rock, the surface of which crumbles and dissolves under atmospheric influences, to give support to the humble lichen, which in its turn dies, and, mingling with the disintegrating rock, forms a thin film of soil for the support of the next higher class of vegetation, we have presented to us the subject of death supporting throughout every degree of vegetable and animal existence.

AN ADDRESS DELIVERED BEFORE THE ALUMNI ASSOCIATION OF THE COLLEGE OF PHYSICIANS AND SURGEONS, etc. March 12, 1863. By WM. C. ROBERTS, M.D.

This address pays a handsome tribute to the memories of the departed Alumni, and closes with a few congratulatory remarks to the members of the graduating class. It is written in Dr. Roberts's usual elegant and graceful style.

THE SUNBEAM AND THE SPECTROSCOPE. By HOWARD TOWNSEND, M.D., Professor of Physiology and Materia Medica, Albany Medical College. Read before the Albany Institute, Feb. 17, 1863.

THE pamphlet is an interesting discussion of the various branches of science since the time of Newton. The author divides science into three distinct principles, viz. light, heat, and the chemical ray, and the conditions of their action are illustrated.

Correspondence.

TURPENTINE IN HOSPITAL GANGRENE.*

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—Permit me to state to you my experience in the use of spirits of turpentine in the treatment of hospital gangrene. Believing that the frequent application of turpentine would meet almost all the indications in the topical treatment of this disease, I have ventured on its use. It gives me pleasure to say that my experience with the remedy has fulfilled my most sanguine expectations; and my good opinion of it is further confirmed by uniform good results obtained from its use, where I have elsewhere recommended it. In conjunction with the sustaining constitutional remedies now in vogue, we apply the turpentine thoroughly every three hours into the wound; and where there are fistulous openings involving the wound, they are at the same time well injected with it, the wound, however, being first cleansed with warm water and any of the ordinary disinfectants; likewise where the fasciæ are involved, and are in the way of a thorough application of the remedy, they are dissected out. In the application of this remedy, though the wound may be perfectly saturated with it, little or no pain in most cases is caused. The only precaution necessary is, to keep the turpentine confined within the limits of the wound, not permitting it to come in contact with the skin adjacent to it; otherwise, and particularly when the parts are excluded from the air, it causes pain, and may in time produce cutaneous inflammation, if not vesication. When the turpentine has been regularly used for a few days, the character of the wound becomes changed. The slough falls out, and the discharges become laudable, leaving a clean basis, with an active tendency to granulation. At the same time, the constitutional symptoms become more favorable. Fever has a tendency to subside, the appetite returns, pain disappears, the patient sleeps, and the countenance again appears cheerful.

The therapeutical properties of spirits of turpentine, which make it, perhaps, the most valuable agent in the treatment of hospital gangrene are the following:—1st. Its permeability. 2d. It is a ready solvent of the broken-down adipose tissue of the wound. 3d. It has local alterative, stimulating, and sedative effects. 4th. Its anti-zymotic properties. 5th. It is antiseptic and styptic. 6th. It is non-escharotic in its effects. It causes no immediate or chemical eschar, as do bromine, nitric acid, and some other remedies, which are often the means, unhappily, of the retention of vitiated secretion of the wound.

With my most respectful submission of this brief communication to you, leaving it at your disposal,

Yours, &c.

G. P. HACHENBERG,

A. A. Surg. U.S.A.

U.S. GEN. HOSP. No. 1, NASHVILLE, TENN., MARCH 20th, 1864.

Army and Navy Intelligence.

ORDERS, CHANGES, &c.

ASSIGNMENTS.

Surgeon Charles McMillan, U.S.V., as member of the Army Medical Board at New York, for the examination of Assistant-Surgeons of Volunteers.

Surgeon W. C. Otterson, U.S.V., as Medical Director, 20th Corps, Army of the Cumberland.

Assistant-Surgeon H. C. Roberts, U.S.V., to Chesapeake Hospital, Fort Monroe, Va.

Surgeon C. A. Cowgill, U.S.V., as Surgeon-in-charge, Foster Hospital, Newbern, N. C.

Assistant-Surgeon N. M. Glatfelter, U.S.V., to the Reserve Artillery Army Corps.

Assistant-Surgeon J. A. White, U.S.V., to Camp of Transients, La.

Surgeon C. L. Allen, U.S.V., as Medical Purveyor, South, Hilton Head, S. C.

Surgeon S. D. Freeman, U.S.V., as Medical Director, District of Iowa, Sioux City, Iowa.

Assistant-Surgeon J. McCurdy, U.S.V., as Assistant Medical Director 14th Corps, Army of the Cumberland.

Surgeon James McNulty, U.S.V., to Fort Marcy, N. M., temporarily as Post Surgeon.

Acting Assistant Surgeon Charles A. McQuesten, U.S.A., to Fort Wingate, N. M., as Post Surgeon.

Assistant-Surgeon J. H. Shont, 1st Cavalry, N. M. Vols., to Fort Union, N. M., as Post Surgeon.

Surgeon E. J. Whitney, U.S.V., as Chief Surgeon Expedition against Northern Apaches, N. M.

Surgeon S. W. Jones, U.S.V., to report to Major-General Sherman, Division of the Mississippi.

Assistant-Surgeon H. E. Goodman, U.S.V., as Surgeon-in-Chief, 2d Division, 20th Corps, Army of the Cumberland.

Surgeon S. S. Schultz, U.S.V., to special duty with the Provost-Marshal-General of Ohio.

DISCHARGES, DISMISSALS, ETC.

Private Aaron Gleason, 101st Co., 2d Battalion, Veteran Reserve Corps, honorably discharged, to enable him to accept the position of Acting Assistant-Surgeon.

Medical Cadet A. P. Esselborn, U.S.A., honorably discharged to accept the commission of Assistant-Surgeon in a regiment of Ohio Vols.

Medical Cadet Charles H. Weaver, U.S.A., honorably discharged at his own request.

Surgeon Frederick Seymour, U.S.V., dismissed by sentence of General Court-Martial, Special Orders No. 31, current series, Department of the Cumberland.

Assistant-Surgeon John C. Fruit, 54th Pennsylvania Vols., honorably discharged to accept a commission as Surgeon of another regiment.

RESIGNATIONS.

Assistant-Surgeon Roberts Bartholow, U.S.A., to take effect May 14, 1864.

APPOINTMENTS.

J. E. Cobb and J. L. Linsley, U.S.A., Wm. Chard, W. H. C. Johnson, D. S. Bolsinger, F. A. Baldwin, H. N. Myzat, E. D. McIntosh, and J. A. Moynhan, U.S.V., and J. T. Simpson, of Massachusetts, to be Hospital Stewards U.S.A.

ORDERS.

Assistant-Surgeon Gerhard Saal, U.S.V., will proceed to Columbus, O., and report for duty to the Commanding General, Northern Department.

Surgeon James D. Strawbridge, U.S.V., is relieved from duty as Examining Surgeon of Recruits at Harrisburg, Pa., and will report in person to the Commanding General, Department of Virginia and North Carolina.

Surgeon George Rex, U.S.V., is relieved from duty at General Hospital, Chester, Pa., and will report to the Commanding General, Department of Missouri.

Assistant-Surgeon Theodore Artand, U.S.V., is relieved from duty at Benton Barracks, Mo., and will report in person to the Surgeon-General for assignment to duty.

"THE BATTLE."

Large Depots and Field Hospitals for the wounded have been established at Belle Plain and Fredericksburg, Va. Those at Fredericksburg are in charge of Surgeon E. B. Dalton, U.S.V., and at Belle Plain in charge of Lieutenant-Colonel J. M. Cuyler, Medical Inspector U.S.A. Previous to, and awaiting the battle, extensive preparations were made for the reception, care, and comfort of the wounded, so that in Washington, Baltimore, Philadelphia, and New York, a vacant bed is ready for every wounded man. Of course, a large number of severe cases must remain in Virginia until they are able to travel. They are arriving at Washington rapidly. All skulkers are sent back to the front. Immediately upon receipt of intelligence of the locality of the wounded, immense supplies were forwarded, with a large number of Army Surgeons, Cooks, and Nurses. In addition to these Acting Surgeon-General J. K. Barnes has also granted, up to noon, May 14, passes to 71 volunteer citizen-physicians who offered their services, and to 373 nurses, also volunteers. The names of the physicians are appended; in many cases their full names are not known.

FROM NEW YORK.—Drs. Vanderpoel, Seymour, Seimans, Detmold, Hamilton, Gurdon Buck, Stephen Smith, Finnell, H. B. Sands, Wolcott, Walser, E. Harris, E. Mead, Goodale, E. W. Abbott, J. M. Carnochan, J. B. Wood, Markoe, Donaghe, Alcot, E. Vondersmith, Booth, T. G. Barton, Johnson, and Krackowizer—25.

FROM VERMONT.—Dr. Woodward—1.

FROM MASSACHUSETTS.—Drs. Ordway, Page, Treadwell, Bigelow, J. B. Taylor, A. H. Blanchard, F. Winsor, A. Coolidge, Alfred Hitchcock, J. C. Harris, M. C. Greene, A. Millett, W. D. Lamb, F. Leland, R. T. B. Goodwin, O. O. Davis, and E. B. Pierson—17.

FROM PENNSYLVANIA.—Drs. Coffey, Mowry, McCook, Hodge, Child, McKennan, H. F. Martin, J. Rowland, D. N. Rankin, D. D. Kennedy, J. E. Shaeffer, J. K. Van Kirk, James King, Wallace, Hunter, Harris, St. Clair, Reed, Savery, Blood, Cook, Elliria, and Brackett.

FROM DISTRICT COLUMBIA.—H. Von Tagen and C. Mason.

FROM NEW JERSEY.—Drs. Corson and Hodge.

FROM INDIANA.—Dr. Clippingier.

MISCELLANEOUS.

Immediately after the late battle on Red River, Assistant Surgeon-General Wood despatched the U. S. Hospital Transports "E. C. Wood" and "C. McDougall" to the scene of action, loaded with plentiful supplies of medicines, stores, and comforts for the wounded.

Mr. A. B. Mott, U.S.V., has been relieved from duty as member of the Army Medical Board now in session at New York for the examination of Assistant-Surgeons of Volunteers.

Those wounds will not permit them to rejoin their regiments less period than thirty days will be granted leave to go to the front.

Those wounds are slight will be sent to Annapolis, Md., and fit for service will be so reported to the Adjutant-General and the Medical Director, who will also give an order to the officer to the regiment.

* This paper was reported to the

Original Lectures.

SPERMATORRHOEA,

BEING A

LECTURE DELIVERED AT THE COLLEGE OF
PHYSICIANS AND SURGEONS

DURING THE SESSION OF 1863-4,

BY WILLARD PARKER, M.D.,

PROFESSOR OF THE PRINCIPLES AND PRACTICE OF SURGERY AND SURGICAL
PATHOLOGY.

GENTLEMEN:—I propose to offer you a few remarks upon the subject of spermatorrhœa, because I am convinced of the importance of your understanding something concerning the characters of this common and oftentimes vexatious malady. Spermatorrhœa may be defined as an involuntary discharge of semen, associated with dreams, and of course occurring at night. I shall consider the subject under two heads. First, I shall refer to that form which occurs in full health, and is the result of a purely physiological condition of the system. Under the second head I shall consider that form which is the result of exhaustion of the nervous system, associated with a local irritation in the prostatic portion of the urethra. This local difficulty is denominated irritable urethra, in contradistinction to urethritis or an inflammation of that canal.

First, as regards the spermatorrhœa of health. In order to supply the physiological wants of the system we have given us certain appetites. For example:—Individual life must be preserved, and we have hunger; the species must be taken care of and propagated, and we have sexual desire. When the stomach desires food the vessels of the great cul de sac, as well as those of the cardiac orifice, become congested, and the sensation which is thus produced, the desire for food, cannot be appeased until something eatable is actually placed into the stomach. If the person goes to bed hungry this sensation, reflected to the brain, will cause him to dream of eating, and during his sleep he will make away with many a palatable dish and many a delicious viand. The occurrence of seminal emission, during sleep, can be explained in the same manner. The natural desire for sexual intercourse not being indulged in, causes a plethora of the seminal vessels, the sensation is referred to the brain during sleep, when it is least able to resist such impressions, and the imagination easily manufactures a dream to suit the emergency. If a person indulges more or less regularly in intercourse with a female, as in married life, the necessity for these emissions does not exist. I believe the great mass of men, after arriving at full puberty, have these emissions more or less frequently, the average being about once in from two to four weeks. If a person's system is any way overtaxed he is not so liable to be subject to these emissions as if he were in the enjoyment of healthful leisure and full diet. It is strictly a physiological process, as is shown from the fact that the nervous system is thereby simply *relieved* rather than *depressed*. This, however, is not the case with the pathological spermatorrhœa, which we shall next consider.

When this flow of semen is very frequent, and is attended with symptoms of impairment of health, then it comes to be a disease.

The causes of this disease are both predisposing and exciting. Under the head of predisposing causes I may mention that some systems are more prone to suffer from it than others; for instance, we meet with it most commonly in the nervous and lymphatic temperaments.

The exciting causes may be summed up under the following heads:—1. Masturbation; and I may say in passing, that the earlier this habit is begun the more serious will be the consequences. 2. Excessive venery. 3. Occupation of the mind by lascivious subjects and improper associations. 4. Hæmorrhoids and constipation. 5. Asca-

rides. 6. Eczema, with its attendant itching. 7. Stricture of the urethra; and 8. Full bladder.

The symptoms, too, naturally divide themselves into local and constitutional.

The local symptoms are few; you have of course the emission, and, besides, there is considerable pain in the situation of the caput gallinaginis, as is proved by the introduction of an instrument. When the instrument passes through the prostatic portion of the urethra, the suffering is sometimes intense, actually causing the patient to scream out. It will be found, too, in almost every case, that, if the finger be introduced into the rectum while there is at the same time a bougie in the urethra and the prostate compressed, there will exist there an undue sensitiveness, and that sensitiveness will be found to extend upwards and backwards to the vesiculæ seminales. The constitutional symptoms are as follows: General prostration of the whole nervous system, manifested by an aversion to physical and intellectual exertion; a dull pain in the back and front part of the head; also pain in the loins, feebleness of the memory, pallor of the face, more or less of a sunken eye, skin quite cold, hands and feet clammy, capillary circulation feeble, aversion to society, hypochondriasis, indigestion, and constipation. The urine is often copious and watery, of low specific gravity, feeble acid reaction, and loaded with phosphates. Sometimes in the urine there are found spermatozoa. In the evacuation of the bowels, especially if they are constipated, the pressure of the feces upon the vesiculæ seminales squeezes out a fluid which the patient regards as pure seminal juice; it is, however, mostly an excess of secretion from these vesiculæ seminales, there being usually but a few spermatozoa contained in it. The immediate cause of this abnormal flow of semen is due to the very irritation which is present at the termination of the ejaculatory ducts, and excites the secretion of the testicles. We see this principle illustrated very often in the case of irritation of Steno's duct, the secretion of the parotid gland being largely increased in consequence. Again, if any irritating substance be taken into the stomach and passed undigested into the duodenum, we know that not unfrequently an excessive flow of bile is induced, which gives rise to the very common complaint, cholera morbus. And after all, gentlemen, what is this cholera morbus due to? The irritating substance, as it passes down the duodenum, comes in contact with the opening of the ductus communis, and an irritation is produced there; that irritation is reflected to the gland, which in this case is the liver, and the superabundance of bile is thrown out, and you have the cholera (the flow of bile). The irritation at the caput gallinaginis being the cause of the spermatorrhœa, you will of course be prepared to appreciate the value of the local applications to these parts which are made use of for the cure of the difficulty.

The diagnosis of the affection is, in the main, not difficult, the patient being generally only too willing to tell you of all his troubles.

Now, Gentlemen, we come to speak of the prognosis. I may say that ordinarily the prognosis is good, more especially when the patients are made aware of the character of the difficulty, and take proper measures to overcome it. But if the causes still remain and are not properly looked after, the system becomes enfeebled both intellectually and physically, the whole character of the individual is changed, the true objects of life become perverted, and a goodly number of these become the subjects of our lunatic asylums, either as confirmed hypochondriacs, maniacs, or idiots. Understanding, then, that one of the most fruitful causes of pathological spermatorrhœa is masturbation, we can comprehend how it is that this vicious habit becoming more and more confirmed, drags down the nervous system into a condition which amounts to a species of insanity.

I am quite certain that a very large proportion of these cases can be saved from such a sad condition if the subjects be fully apprised of the danger and injury of such a debasing habit, and occupy the energies of their mind in pro-

per intellectual pursuits, and their bodies in vigorous outdoor exercise. I may say, in passing, that all kinds of treatment and medication, without the above course, are comparatively inoperative or unavailing.

Sometimes connected with spermatorrhœa there is impairment of the vigor and force of the generative capacity, and patients often in this depressed condition of the system fall into a state of mind which is mono-maniacal upon the subject of virility. Every surgeon must be more or less teased by this class of patients, some of whom will not be convinced as to the error under which they are laboring. But of this we shall speak more in detail as we proceed.

Having, then, duly considered the different characters of this disease, we shall be prepared to study its treatment.

(To be continued.)

Original Communications.

REPORT OF

SIXTY CASES IN PROF. NOEGGERATH'S CLINIC FOR DISEASES OF FEMALES, AT THE N. Y. MEDICAL COLLEGE.

WITH REMARKS

By C. C. TERRY, M.D.

THE following tabular statement presents the character and frequency of the diseases observed in these cases:—

Insufficient development of the uterus.....	3	Uterine hæmorrhage.....	4
Superinvolution.....	3	Amenorrhœa.....	5
Subinvolution.....	1	Dysmenorrhœa.....	14
Endometritis.....	6	Vicarious menstruation.....	2
Perimetritis.....	3	Sterility.....	3
Metritis.....	6	Epilepsy.....	1
Ovaritis.....	2	Hysteria.....	1
Ovarian cyst.....	1	Anæmia.....	3
Hydrometra.....	1	Chlorosis.....	2
Fibroid tumor.....	3	Vaginal catarrh.....	2
Cancer uteri.....	2	Vulvar catarrh.....	2
Anteflexion.....	5	Vulvo-vaginal catarrh.....	1
Retroflexion.....	4	Pruritus vulvæ.....	2
Anteversion.....	2	Cystocele.....	2
Lateroversion.....	5	Catarrh of Cowper's glands.....	1
Retroversion.....	3	Abscess of recto-vaginal septum.....	1
Descensus uteri.....	3	Varicose dilatation of pelvic veins.....	1
Prolapsus.....	2	Cystic catarrh.....	3
Constriction of cervical canal.....	2	Cutaneous neuralgia.....	2
Cervical catarrh.....	7	Infra-mammary pain.....	10
Inflammatory hypertrophy of cervix.....	1	Mammary secretion.....	1
Follicular hypertrophy of cervix.....	1	Secondary syphilis.....	2
Erosions, excoriations, and granulations of the os.....	9	Cerebral congestion from scanty menstruation.....	1
		Fluctuating abdominal tumor.....	1

INSUFFICIENT DEVELOPMENT OF THE UTERUS—EPILEPSY.

I. Margaret C., æt. 21 years, native of Scotland, unmarried. Menstruation commenced at 15, and occurred three times at regular intervals of a month, then entirely disappeared, and remained absent nearly three years. Recommended at 18, and continued a year with no nervous disturbance. Epileptic attacks then made their appearance at irregular intervals, commencing with muscular spasms in the right hand, the aura passing thence to the head. Nausea and intense cephalalgia continued more than an hour after the momentary attack. From the first the menses were exceedingly scanty, being a mere "show," with a great deal of dysmenorrhœa, continuing but three days at the most. A moderately firm hymen closed the posterior two-thirds of the ostium vaginæ. The uterus was little more than the prepuberal size, very movable, the cervix projecting into the vagina, and presenting the characteristic nipple shape. The sound entered the narrowed canal of the cervix with difficulty, and showed the dimensions of the uterine cavity contracted in all its diameters. The most constant symptoms were cephalalgia of the right side, and shifting pains in the lumbar and right iliac regions.

II. Helen B., æt. 26, native of New York, has been married eight years, but without becoming pregnant. She

began to complain of vague symptoms soon after marriage, expressing her condition as "feeling poorly." Constipation and tympanites were specially distressing. Menstruation commenced at about 16, and continued at regular intervals; but the duration was short, usually only half an hour, and the quantity inconsiderable. The uterus was found healthy but of small size, movable, with a nipple-shaped cervix and minute os externum. A considerable and constant pain in the abdomen had existed almost since marriage, and the quantity of urine voided was excessively increased before and after the menstrual discharge.

III. Mary C., æt. 23, unmarried. Menstruation commenced at 18, and continued at regular intervals of about four weeks, lasting but two or three days at the most, merely a show. From the first she has suffered great dysmenorrhœa, so that at each period she "would rather be dead." Added to this were cephalalgia, dizziness, back-ache, pain of a burning character in the hypogastrium and left iliac region. The patient was a stout, plethoric servant girl, accustomed to labor, but of late unable to retain a situation on account of her frequent illness and increasing stupidity. She was also subject to habitual constipation. The external genitals were fully developed, ostium vaginæ admitting a good-sized speculum, and vagina capacious. Uterus small, dense, very movable; the cervix high and forming a conical projection into the vagina; the os not distinguishable by the touch. The speculum showed the vagina of normal vascularity, the cervix pale, the os a mere dot at the apex of the cone, and so small that the ordinary pocket probe could not be introduced. When its introduction was attempted, the bulbous point barely entered the orifice, and the uterus moved away out of reach.

In these three cases of the so-called incomplete development of the womb, neither uterus presented the foetal shape, but all were pear-shaped, with shortened conical cervixes; in fact differing from the fully developed adult uterus, by a deficiency of all their diameters and a denser consistence. All were in females of otherwise good development and appearance, and could be traced to no constitutional disease. In the first and third, the cerebral function had evidently suffered severely, as evidenced by the epilepsy of the one, and the confusion of the other. While the first remained taciturn, yet capable of sensible and connected conversation, the other was constantly running into a disconnected and scarcely intelligible discourse, interrupted occasionally by a peculiar unmeaning smile.

Abundant experience has shown that the suffering and symptoms presented by these patients, are directly referable to an insufficiency of the menstrual secretion; hence the indication in these cases was two-fold:

- 1st. To increase the secreting surface;
- 2d. To increase the secretion.

In order to effect the first of these objects—increase of the secreting surface, advantage was taken of the general law which prevails in uterine therapeutics as well as in uterine pathology and physiology, viz. "Continuous and increasing irritation and expansion of the uterine cavity or uterine walls leads to increased growth of the organ and of its cavity;" for if there be any hypertrophy of the uterine parietes, it is readily indicated by the enlarged cavity. No matter whether that body be a growing ovum, a polypus, a fibroid tumor, an hydatid, the accumulation called hydrometra, a blood-clot, or the ordinary dilating sound, the same law holds good, although the irritation and dilation, to be successful, must be employed frequently, and often for a considerable time. A very small uterus, and especially a uterus whose development has been not only imperfect but irregular, would make the prognosis less favorable than a regularly though somewhat imperfectly developed uterus.

In the first case no other treatment than the sound was used. The first introduction was somewhat painful and caused a little irritation; but each succeeding application, at intervals of several days, grew less irritating, and the canal gradually enlarged to the normal size. The sound

was allowed to remain in the uterine cavity for twenty or thirty minutes each time, and the patient was required to rest a few hours after each introduction. Gradually the epileptic attacks lessened, and finally ceased altogether. The countenance brightened, the menses appeared in full quantity, the symptoms one after another yielded, and in less than five months she was perfectly recovered, save an occasional headache, which however was of little moment. In the third case more difficulty was experienced. The smallness of the cervical canal and the patient's reluctance caused much delay. The constipation yielded to a mild clectuary; the cervical canal became sufficient to admit the ordinary sound; the pallor and hardness of the uterine tissue gave place to a more normal color and consistence; two menstrual periods passed with very great relief; and the patient expresses herself as "a great deal better." The second case was ordered powdered cubebs.

The remarkable circumstance in this was the increased urinary secretion at each menstrual crisis, constituting a "metastatic or vicarious menstruation." This is one of the less common manifestations of menstrual digression, and deserves notice as being one of the many succedanea by which the vascular system rids itself of its periodic superfluity. It is not always easy to determine whether an abnormal quantity or quality of secretion or effusion from a tissue or organ, be vicarious menstruation, or the result of some pathologic condition of the part engaged. At all events, amenorrhœa and periodicity of such phenomena, combined with an examination of the part involved, will usually determine the question. Periodic hæmorrhages from the nose, rectum, vulva, ears, ulcerated surfaces of the cervix uteri, gums, and even the skin, with no diseased condition of the parts engaged, have undoubtedly occurred, not only in chlorotic and plethoric persons, but also in females of apparently good health, who have had some form of amenorrhœa. Epistaxis is probably the most common form of hæmorrhage connected with suppressed menstruation. Various mucous surfaces take on increased action at periodic intervals corresponding with the menstrual crises; thus the bronchial and intestinal mucous membranes pour out an excessive quantity of their peculiar secretion; the vagina becomes catarrhus, and the renal secretion, as in the case before us, becomes much augmented. Although the period of life at which menstruation commences is widely different in different individuals, depending upon a variety of causes, we may conclude, from Dr. Whitehead's analysis of 4000 cases, that the average age is about fifteen years and seven months, the variation being usually from twelve to eighteen years. Insufficient development of the uterus is regarded as a frequent cause of tardy menstruation. The first and second of the above cases commenced before 16, the other at 18. Sterility is not a necessary consequence of abnormal development of the uterus, provided the other essential organs are competent. Pregnancy has taken place before the exceedingly tardy menses appeared in the small uterus, in the unicorn uterus, and even a twin pregnancy in a uterus bicornis.

(To be continued.)

ON STRABISMUS.*

By HENRY D. NOYES, M.D.,

SURGEON TO THE NEW YORK EYE AND EAR INFIRMARY.

(Continued from page 256.)

THE questions to be settled before the operation are, is sight imperfect—can it be improved? If yes, the squint can be perfectly corrected. If not, we must be content with partial success. In the former case we restore binocular vision, in the latter we obtain an improvement in personal appearance.

The only successful mode of treatment is the division of one or more muscles. All other attempts by glasses and diaphragms are of no value. The operation is not the division of the continuity of the muscle; it is cutting the tendon

from its insertion, and causing it to adhere to a point further back on the sclerótica. Division of the belly of the muscle, or at any point behind the insertion, results in extreme shortening, and perhaps renders it impotent to move the globe. The bit of tendon remaining attached, does not grow again to the posterior portion, but shrivels up, and the remaining part either grows fast to the globe very far back, or may slip into the capsule of TENON and be able to act on the eye only by the medium of this fascia. A brief allusion to the anatomy will explain this, and show that this was the great error of the early operations for squint.

The oculo-orbital fascia, when reflected from the wall of the orbit, passes behind the globe in a cup-like form. The globe rests in this cup as the head of the femur in the acetabulum. The muscles and nerves perforate the ocular portion of the fascia in their passage to the eye. The muscles carry with them some of the fibrous membrane, which gets thinner as it passes forward, and finally is lost as the sub-conjunctival areolar tissue. The distance between the point where the muscles perforate the fascia, or capsule of TENON, and their insertion into the globe, is from $\frac{1}{2}$ to $\frac{1}{4}$ inch. It is evident that the further its insertion is carried backwards, the weaker is the muscle made. It is shortened, and its contractibility made less effective, and its power is also exerted to less advantage, because the sine which represents its mechanical power is shorter. (Illustrated by diagram.)

How should this tenotomy be done? So as to separate the muscle with little disturbance of the fibrous tissue around it. A simple tenotomy can only be done with small scissors and a small hook. I use these instruments: hooks of three sizes, curved at right angles, the tip probe-pointed; scissors straight, small, and the points ground off; fine clawed forceps. I do not think it material whether the conjunctival wound is made vertically or horizontally, provided it be small, not more than a quarter of an inch long. I make it just in advance of the insertion of the tendon, and vertically; run the scissors backwards to cut the areolar tissue overlying the tendon, then pass in the hook with its point downwards if designing to pass under the lower border of the muscle; keep it close to the sclerótica, and when far enough back, turn it upon the tip and slip it under the muscle; drag the insertion into view and cut the tendon between the hook and the globe. All the insertion is not severed at the first clip, but have another hook ready to take up the remainder of the insertion; holding the eye in command by the first hook, divide what is caught by the second, and thus sever the whole insertion. Such a tenotomy can be managed so as to produce not more than $1\frac{1}{2}$ or 2 lines alteration in the visual axis. It is well, before the operation, to measure the deviation upon the border of the lower lid. Here is a measure contrived for this purpose; its middle point is applied to the centre of the palpebral opening, and the point upon it, which is reached by the centre of the pupil, gives the amount of squint in lines. The tenotomy I have described may, by cutting the adjacent fibrous tissue, be made to effect a correction of 3 lines.

It is not safe to push the effect of one operation too far. Too free incisions will render the muscles utterly unable to influence the eye. If the squint be more than 3 lines, the correction must be divided between the two eyes. This is a point of difference between present and former practice. Since the purpose of operating is to restore equilibrium, it would not seem just to do all the subtraction of force on one side.

I can, however, demonstrate this, by the aid of this diagram. I suppose a converging squint of the right eye, of about 4 lines, expressed by its angle amounting to about 55 degrees. At this point the turning power of the right rect. int. is not equal to that of the left rect. int., because the lever on which it acts is so much shorter than that of the other eye. The lever, or the line which represents its mechanical power in the left eye, is the radius of the circle,

* Read before the New York Academy of Medicine, March 2, 1864.

and continues to be, until the eye turns in to the point where the insertion of the muscle becomes a tangent. In the right eye, the line which measures its power is no longer radius, but is the sine of the arc included between its insertion and the point of impact on the circle, of the line which unites the centre of motion to the origin of the muscle. This is the sine of the arc and is less than radius, because the arc is less than 90° . Now, suppose the whole correction of the squint is put upon the left eye. The insertion of the muscle is let back until the visual axis is parallel to that of the other eye. The insertion goes to this point. What happens? In movements towards the left side, the right rectus internus is at a great disadvantage; its turning power is represented by a very short sine, while the left external rectus has radius for its turning power. Moreover, the left rectus internus, by slipping back, has brought its two extremities nearer together, and it has less contractile power. This defect appears again in efforts at convergence; hold up the finger at five or six inches from the face; the short sine of the right side contrasts painfully with the full power of the left, and, as a consequence, the right eye ultimately gives up the effort and lapses into divergence. By dividing the effect between each eye, since the right rectus internus is hypertrophied more than the left, it will bear a greater reduction in mechanical advantage than the left, and the two internal recti will then be able to do their work harmoniously.

In strabismus of 5 or 6 lines, both eyes may be operated on at one sitting. For 3 lines it is better to give an interval of two or three weeks, that the effect of the first operation may be correctly known. The effect is less during the first week, than during the succeeding month or two. After this, the effect is again increased. This corresponds to the primary healing, the contraction of the cicatrix, and its final relaxation. For converging strabismus of more than 8 lines, three operations may be needed—two on one eye and one the other. For diverging strabismus, I have twice had to do four operations—two on each external rectus. The effect of tenotomy on the external is not so great as on the internal rectus.

When the cure is partial, vision being good, the patient complains often of double images. By the help of prisms you can determine the angle of deviation yet remaining, and get a hint as to the extent of a subsequent operation.

If the patient have *hyperopia*, the cure is not complete, nor will it be permanent, if convex glasses be not used in reading, writing, sewing, etc. The necessity for glasses depends on the degree of hyperopia and the power of accommodation. In a person over 20 years, I should give glasses if the hyperopia be more than + 20. For a person below 20, the hyperopia might be + 10 and glasses not needed to prevent relapse of convergence. But always warn such persons that a tendency to relapse of squint means the necessity of wearing convex glasses, and that, irrespective of age. For astigmatism, cylindrical glasses.

In myopia the rule cannot be applied with equal force, because many of these patients have impaired perceptive power from atrophy of the choroid and retina; and other disadvantages attend the employment of concave glasses for near objects. If, however, the perceptive power be good, and there be no lesion of the choroid, weak concave glasses will aid the muscles in keeping the advantage they have gained by division of their antagonists.

I do not think it well to operate under five years of age, because young children cannot give accurate data about their sight.

I have supposed improvement of sight to be possible. If, now, this be not the case; if one eye be greatly defective, and the operation is desired to improve its position, do not promise to make both eyes "perfectly straight," as the phrase is; but you may safely promise a decided improvement. Aim, if there be convergence, to leave a little remaining, the visual lines meeting at the distance of six or eight inches when viewing things at moderate distances. A slight convergence is scarcely noticed, but a little diver-

gence is very disagreeable. If the operation be for divergence, operate so freely as to convert it into slight convergence, performing the operation on both eyes. By this proceeding, cases will be left in a more satisfactory condition, and surgery will not have the censure of making a deformity worse than it was before.

If the effect of a tenotomy is greater than was anticipated, it may be retrieved by putting a stitch into the loosened end of the muscle and fastening it to the conjunctiva. This may be done immediately after the operation, or even the next day. If chloroform is used it occasions loss of time, and, to ascertain the result, you must wait until its effect has passed away. To test the effect of the operation for converging squint, see if the patient can still converge both eyes to the finger held within six inches; if he cannot fix steadily at this point, the operation has been too free; then put in the suture. A more accurate test is the study of double images and what prism he is able to overcome. If you have operated for converging squint, and the patient have diplopia in seeing near objects, and the images be crossed, then put in suture. So, too, if the conjunctiva has been widely opened and there is danger of the caruncle sinking, put a stitch obliquely through the wound and pucker up the conjunctiva.

From a large conjunctival wound granulations sometimes sprout; they may be snipped off with scissors.

Treatment of insufficiency of the internal recti is for slight cases by prisms, when their angles need not be more than 8° . If more serious, tenotomy of the external recti, partial or complete, will regulate the matter.

For *lucitas*, division of the antagonist is practised, but the result is not pleasant; the eye springs forward out of the orbit, and it remains fixed and staring. If any power remain in the paralysed muscle, it may be helped in its function by bringing its insertion farther forwards—just the reverse of tenotomy. DR. SIMROCK, of this city, has practised this operation a number of times. I have done it. It consists in first dividing the antagonist, and then separating the paralysed muscle at its insertion, dissecting it up freely, passing a thread transversely through it; then, having a needle at each end, carry the ends of the thread under the conjunctiva, around the margin of the cornea, and come out of the conjunctiva at the opposite side of the cornea; then pass one needle back again and run it through the conjunctiva at the wound, and tie the thread firmly. The conjunctiva is drawn up over the cornea like the mouth of a purse, and the muscle is pulled forwards. The sclerotic needs to be laid bare in front of the tendon of the muscle, up to the edge of the cornea, and the muscle must be loosened from its attachments to the fibrous tissue. It grows fast in its new location in twenty-four to forty-eight hours. At the time of operation the antagonist muscle is also separated. The thread may be left in situ for that time without serious reaction. Pretty smart inflammation, perhaps with chemosis, does not destroy the good effect of the operation. Its beneficial results are sufficient to warrant its performance in such cases as have reached the period when medical treatment and the vis medicatrix nature have nothing more to offer. This will be in, say, twelve months after the original paralysis. I could relate a most interesting case in which I performed this operation, and also divided four other muscles, to cure a partial paralysis of the superior and internal recti of the right eye. The result was very satisfactory.

Lastly, we are sometimes called upon to rectify the errors of former surgery, in attempting to restore an eye to its normal position which has been badly operated on and the muscle has lost all control over the eye. I have seen some painful cases of divergence following operations for the cure of convergence. I have operated three times under these circumstances. In one case nothing could be seen of the cornea of one eye, and the glaring sclerotic presented a ghastly appearance.

The relief of this condition is by searching for the extremity of the divided muscle, and the dissection is always diffi-

cult, loosening it from surrounding adhesions and drawing it well forwards; denude the sclerotica in front of the muscle of the conjunctiva that it may grow fast, and the next step is to retain the muscle in place. When there is but little of the muscle left, too little to permit the attachment of a suture, as in the operation of Dr. SIMROCK, the method which Mr. CRITCHETT and Prof. GRAEFE use, is to be chosen. Expose the tendon of the opponent muscle; pass a thread transversely through it and tie it fast, then cut the tendon behind the thread; this gives command over the eye; now carry the thread to the opposite side of the face and fasten it there by sticking-plaster. I have always operated for the benefit of the internal rectus, and have once passed the thread leading from the tendon of the external through the skin of the nose and tied it. The eye must be kept in this position for twenty-four hours, and more, if reaction do not prevent. An excessive correction of position as the immediate result need not create anxiety. The eye begins to turn back very soon, and I have found the ultimate condition a decided improvement. There is, of course, diminished mobility, but the arc of movement has been brought around to the useful position. If the operated muscle has long been disused, it may have atrophied or undergone fatty degeneration, so as to be unable to contract; but it is right to give it a trial.

I think I may be allowed to conclude after this somewhat elaborate discussion, that the operation for strabismus, properly estimated and rightly performed, should not be abandoned, but deserves a place among valuable surgical operations. The deformity is to be regarded no longer as always constituting the essential disease, but frequently only a symptom of visual disturbance. The operation may be done, either for its own immediate results alone, or as ministering to a nobler result in the restoration of sight. A quarter of a century has, therefore, brought the operation for strabismus to higher dignity and usefulness than its originator propounded.

TWO CASES OF EXTIRPATION OF POLYPI IN THE LARYNX.

(With Wood-cut Illustrations.)

By FRIEDRICH SEMELEDER, M.D.,

OF VIENNA.

[Translated from the Vienna Medizinal Halle, by EDWD. T. CASWELL, M.D., of Providence, R. I.]

(Continued from page 258.)

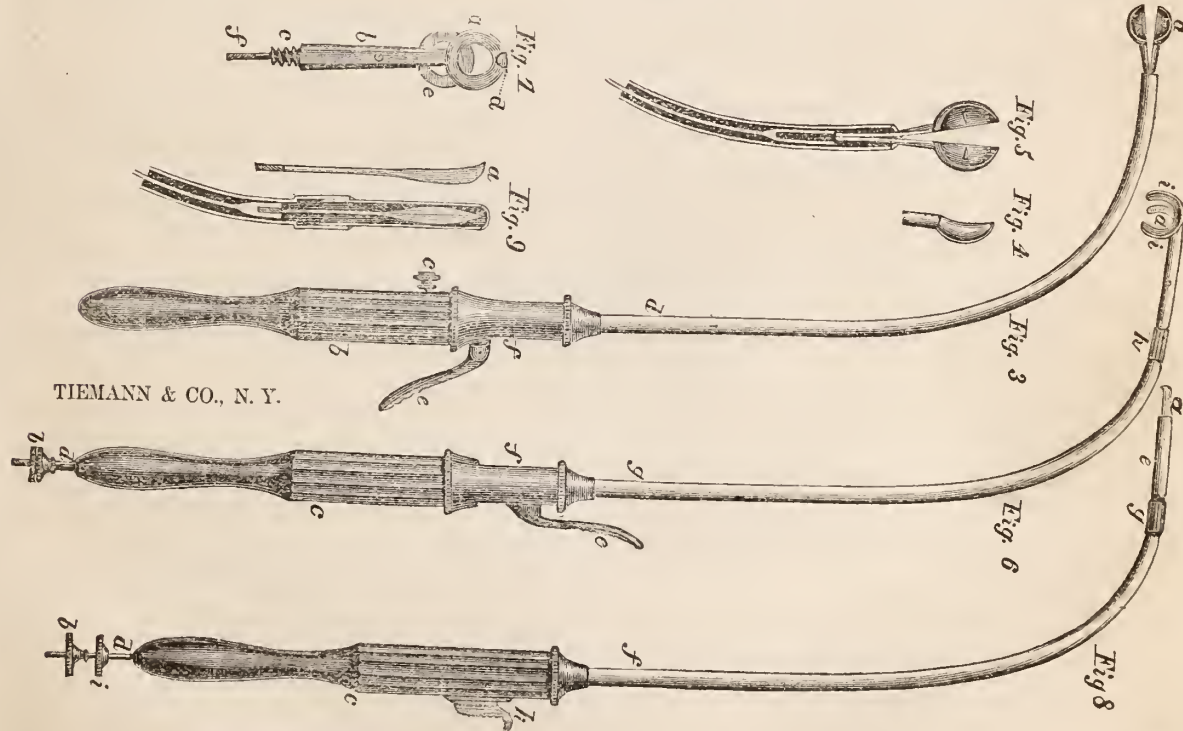
The instruments which I have hitherto applied to operations upon polypi in the larynx are three—the forceps, a guillotine, with a sickle-shaped knife, and, finally, an instrument so arranged that any one of several blades may be introduced, the blade being at the same time concealed. As these instruments have rendered good service, I will devote a few words to their explanation. Joseph Leiter, Instrument Maker and Bandagist, No. 76 Alser street, Vienna, can furnish any of them.

I. LEITER'S LARYNGEAL FORCEPS

(Fig. 3, two-thirds of the actual size), is the result of manifold alterations and improvements.

The Spring forceps *a*, when closed, resembles the half of a hollow sphere; the cutting edges, which shut upon one another (Fig. 4) are dull. Each blade of the forceps has in its concavity a spear-point which does not extend beyond the cutting edge. At the end of the spring the forceps terminates in a screw-thread (Fig. 5, actual size) of six millimetres in length; by means of this the blades are firmly screwed into a little tube at one end of a wire, the other end of which is firmly held in the handle *b* (Fig. 3) by the screw *c*. The metallic tube *d*, which can be bent if necessary, moves over this wire and is shoved forward by pressure upon the lever *e*, and thus the blades of the forceps close quickly. When the lever *e* is freed from pressure, the tube *d* is driven quickly back by a spiral spring placed within the box *f*, and thus the forceps are readily opened. The cutting edge of the forceps *a* can be turned so as to seize a polyp in any direction. If the instrument is to be taken apart the blades *a* must first be unscrewed, then the screw *c* loosened, and thus the wire will be set free, and finally the milled head of the box *f* must be unscrewed.

The rounded sickle-shaped knife invented by me (Fig. 6, two-thirds the actual size), is intended to take the place of Bruns's scissors. It may be applied in any direction.



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The blade *a* (Fig. 6), like the forceps in Fig. 5, is fastened to a wire, the end of which, passing through the handle *c*, is fastened by the screw *b* to a tube *d*, which moves in the handle. By a spiral spring concealed in the handle *c*, the tube *d* is pressed against the short fork-like end of the lever *e* which lies in the box *f*. The blade *a* is covered by a double two-leaved sheath *i* *l*. Both leaves of the sheath are attached to a round tube, which terminates in a screw-thread fitting into the double screw *h*. This double

screw *h* is fastened to, and turns upon the end of the tube *g*, which is stationary but which may be bent. If pressure is applied to the lever *e* the knife slides suddenly out, and is again covered by the leaves of the sheath. When the double screw *h* is unscrewed, the blade may be turned in any direction, just as in the case of the forceps *a* in Fig. 8; then the blade being held by its sheath in the left hand, the double screw is again tightened with the right, and the instrument is ready for application.

Fig. 7 is a double ring between the leaves of which a ring-shaped blade plays. This contrivance, resembling the Tonsillotome, may be screwed on to the instrument, Fig. 6, instead of the sickle-knife, and it may be manipulated in the same manner. In Fig. 7, *a* represents the double ring, *b* its stem with its screw *c*; the two rings are held in place on the one side by the clamp *d*, and on the other by the screw at *b*; *e* is the knife drawn down, and *f* its terminal screw.

The instruments, Figs. 6 and 7, may be taken apart by unscrewing first the cutter, then the lever, and finally the screw *b*.

Neither the guillotine nor the sickle-shaped knife is provided with the spear for piercing a polyp. I have stated above the injurious effect which these spears may produce, and I think we attach altogether too much importance to the falling down into the air passages of a small polyp or a fragment of one. The experience of Moura-Bourouillou confirms my opinion. He removed a small polyp from the vocal chord by means of a wire sling; on the end of the instrument there was a small arrow-head for piercing the tumor. But he had reckoned without the host, and the tumor fell into the trachea; it did not, however, cause the slightest inconvenience. In the case of larger formations this point would demand greater consideration, but in all such cases neither of these two instruments would come in question.

Fig. 8 (two-thirds the actual size) represents Leiter's covered knife, which may be applied in all directions, and into which cutting instruments may be introduced, either probe-pointed or lancet-shaped, or like an ordinary scalpel.

The attachment of the blade to the wire is accomplished as shown in Fig. 9 by a screw. The wire to which the blade is attached moves in the tube *f* and also in the handle *c*, in which it is fastened to the tube *d* by the screw *b*. The tube *f* is attached to the handle and does not admit of motion, but it may be bent. At its other extremity it has a contrivance for changing the direction (Fig. 9) like the one in the preceding instrument; only here the tube *e*, which is slit in front, serves as a sheath for the blade *d*. In Fig. 8 the double screw *g* holds the sheath fast. Fig. 9, *a* represents a scalpel-handle which may be introduced. The tube *d* is kept down by a spiral spring placed in the handle *c*, and thus the blade is kept concealed in the sheath. By shoving forward the slide *h*, which is screwed on to the tube *d*, the blade is driven forwards. The screw *i* serves to regulate the protrusion of the blade. The instrument may be taken to pieces by unscrewing first the knife, then the screws *b* and *i*, as well as the slide *h*, and finally the tube *f*.

The tubes of all these instruments are colored black, so as not to interfere with the reflex image in the mirror.

I can recommend these instruments from my own experience, and I believe that with these the operator would be quite well provided for all cases.

CASE II.—The case here recorded may indeed be considered as one of the most difficult for laryngoscopic operation.

A lady (her age I did not ask), a governess, came to me last autumn to be examined and to ask my advice. She had suffered for five years from complete aphonia, which had been gradually developed. On a careful examination, I discovered three



FIG. 10.

formations of various sizes, as in Fig. 10. The largest of these was spherical and was seated in the vicinity of the left vocal chord; a second, smaller and club-shaped, projected from the anterior angle of the glottis, and lay with its free extremity upon the first; the third and smallest protruded from the anterior surface of the right arytenoid cartilage, at about the level of the vocal chord, and extended into this latter structure.*

I stated to her that I was inclined to operate; that I could not insure success, so far as the restoration of the voice was concerned; but that by the operation, even as regarded the voice, nothing was to be lost, since she was already voiceless, a circumstance sufficiently unfortunate for a governess. To my amazement, I must confess, there was no dyspnoea, not even an abnormal murmur to be heard on auscultation.

(The author goes on to state that the patient had been examined by two laryngoscopists, one of whom made the

diagnosis, but at a time when the formation was not so large, and considered an operation impracticable; the other, however, looked forward to an operation at a later date. The lady had also been advised by another physician to go at once to London or Paris, where he thought she might long ago have been freed from her polyp; while in point of fact, up to that time, no laryngoscopic operation had been undertaken in either of those cities.—Tr.]

The formation had at first, from its pale, reddish-yellow color, from its dim lustre, and from its uneven raspberry-like surface, led me to regard it as an enchondromatous or a fibroid tumor, but as I studied it more carefully with reference to a future operation, I found by the aid of the sound that it had something of the consistency of flesh, and, finally, I concluded that it must be composed of areolar tissue. The largest of the tumors proceeded, as I have said, from the left side of the ventricle of the larynx, and covered the left vocal chord in such a manner that only a small portion of the posterior part of the chord could be seen; this fragment seemed to have a normal appearance. The anterior extremity of the left vocal chord was covered by the polyp No. 2. As the patient was so sensitive under the examination, I could not determine whether the polyp No. 1 lay free upon the left vocal chord, or whether it was intimately connected with it. When the glottis was closed all three of the polypi were shoved over each other. Thus much, however, I could observe. By the attempt to utter sounds, the polyp No. 1 was rolled up around its broad basis, so that it would then lie upon the right vocal chord, and would be wedged in between the ventricular and the vocal chords of both sides. The polypi Nos. 2 and 3 proved to be quite freely movable, following the respiratory current; No. 2 particularly, with its free end glided down over No. 1, and was again thrown upwards by a forcible expiration.

The patient, aside from this local trouble, was apparently in perfect health, and there were no reasonable grounds for supposing a connexion between the local disease and any cachexia, or for the preëxistence of any special disturbing cause.

(To be Continued.)

Reports of Hospitals.

U. S. GENERAL HOSPITAL, CENTRAL PARK, N. Y.

Surgeon B. A. CLEMENTS, U.S.A., in Charge.

DISLOCATION OF THIGH INTO THYROID FORAMEN REDUCED BY MANIPULATION.

SERVICE OF DR. GEO. F. SHRADY.

THE following case of dislocation into the thyroid foramen is reported, not so much on account of its rarity of occurrence or of any original plan of treatment that was instituted, as for the sake of adding to the statistics of the accident:—

A. B., German, private, while walking at night over a tressel railroad bridge, fell between the sleepers, a distance of forty feet, and was rendered insensible. When he recovered, he found himself lying at the foot of one of the hollow main supports of the bridge. He was soon after assisted to rise, and after being temporarily cared for, was sent to the hospital. On being carefully examined, he was found to present the following symptoms:—The right lower extremity was everted, advanced before its fellow, abducted, rotated slightly outwards; the knee and hip being slightly flexed. He was capable of moving the thigh only to a very limited extent, and there was noticed a marked prominence at the inner upper third, just below the flexure of the groin, while, instead of the usual prominence created by the trochanter, there was the characteristic flattening of the hip. The swelling on the internal aspect of the thigh was hard and globular, and over its most prominent portion, the tendon of the adductor magnus muscle stood out distinctly. The foot maintained its natural relations

* For convenience of reference these will be designated respectively as Nos. 1, 2, and 3. [Tr.]

to the line of the limb. There was a good deal of aching pain along the whole outer aspect of the thigh. The patient being etherized, Dr. Shrady proceeded, forty-eight hours after the accident, to reduce the dislocation in the presence of, and with the assistance of Drs. Clements and Fernandez.

Extension was first made in the line of the limb, and the thigh was gradually flexed upon the pelvis to a point opposite the centre of the thigh of the opposite side, when the limb which had been kept abducted was rotated inwards. The head of the bone then slipped into the acetabulum. During the latter part of the manipulation the head of the bone was crowded firmly outwards by pressure with the hand. The two extremities were then bandaged together, a thick compress being placed between the thighs high up. The patient was kept confined to bed for seven or eight days, at the end of which time he was allowed to use his lower limbs cautiously. At the expiration of fifteen days he was able to walk about without the aid of a crutch, and with but a slight halt.

The patient did not recollect in what position he was at the time he recovered his senses; he might have been prone or supine, and in either condition it would be somewhat difficult to judge as to how the injury was inflicted. It is probable that he either struck upon his feet, with his legs spread apart, or else falling feet foremost, his legs also being abducted, the right one during his descent struck against some of the projecting bars which formed one of the main supports of the bridge.

The lower and internal portion of the capsular ligament must of course have been torn, and the round ligament severed. It was not necessary to use any undue force in the reduction, as the head of the bone, after a little coaxing, followed the usual course around a small segment of the inferior rim of the acetabulum, being finally tilted into that cavity by rotation and adduction of the limb.

BELLEVUE HOSPITAL.

FRACTURES OF THE LEG.

We do not propose to write the history of any given number of cases of this accident, but merely to describe the method of treatment which at present holds the precedence in this hospital. Various splints have been employed, and the experience thus accumulated has produced a decided partiality for certain surgical appliances, and also disabused us of the idea that every fracture of the bones of the leg may be successfully treated by any single apparatus; for the practical surgeon is often obliged, in particular cases, to exercise his best judgment in the selection and application of some one of the approved dressings.

For most simple fractures of the tibia and fibula, uncomplicated with any very serious lesions, we prefer some material which can be made pliable by moisture or heat, and in this condition moulded and secured to the limb, so that when it dries or cools, a firm, accurately fitting splint is obtained, which meets all the indications of this class of cases. This may be accomplished with sole leather, felt, binder's board, and gutta-percha. Of these, sole leather is by far the least objectionable in most cases, as it can be adapted easily, is firm, clean, and agreeable to the patient, and does not confine the exhalations. The same splint can be used for an indefinite number of cases by again making it pliable with water. For other fractures of the leg, such as the compound, and those with serious complications, the fracture box, with its modifications, is ordinarily used. For the leather splints, besides the above-named merits, it is claimed that they are as efficient in preserving the coaptation of the fractured bones as any other dressing, that a requisite amount of extension may be maintained when required, and that the patient is not compelled to keep his bed, but may get up, and with his crutches go about and attend to his business. But, the more fully to appreciate its worth, let us compare it with other dressings which are in use in the hospital. Pott's splint, or its counterpart the

double inclined plane, has for its object the reduction of the anterior displacement of the upper fragment of the tibia, by the relaxation of the posterior muscles; but what surgeon does not know that he is too often baffled in his efforts to effect a reduction of the bones by this postural method? For what is gained by relaxing the muscles which act upon the lower fragment, is often lost by the tension of the quadriceps extensor muscles upon the upper fragment, through the ligamentum patellæ. Moreover, the employment of this apparatus obliges the patient to remain in bed. Now this displacement of the fragments of the tibia can be much more satisfactorily corrected by simple extension than in any other way; and that dressing which will subserve this purpose with the least inconvenience to the patient and surgeon, is the one which should be preferred. This we claim for the leather splint, by cutting out of firm sole leather two pieces, which can, when wetted, be neatly adjusted to the foot and leg so as nearly to surround the limb, and with a roller firmly securing the foot pieces to the foot. Giving the foot thus bandaged to an assistant, who makes the desired amount of extension, the surgeon continues the roller firmly upwards till the knee is reached. The mechanism of the extension thus obtained can best be expressed by supposing the leg to represent a truncated cone, with its base upwards, and corresponding to the greatest diameter of the leg; now by confining the splints to the foot, which is acted upon as a *point d'appui*, we next ensheath the conical limb above in a firm mould, and it is easy to conceive how difficult it would be for any given segment of this graduated cone to approximate the foot, even though the natural support afforded by the bones be absent, as in oblique fractures; for this could not occur without forcibly wedging the cone with an increasing circumference above into the mould, with a decreasing circumference below. In short, the unyielding leather, supported by the roller, is the extension, and the conical shape of the limb the counter extension. This explanation of the manner of extension is pleasing in theory, and the results obtained in practice demonstrate its correctness. These splints, when applied, not only allow the patient a greater degree of mobility and comfort in bed than either Pott's splint or the inclined plane, but also allow him to leave his bed and go about. Thus we have the indications answered with less inconvenience to the patient than when treated on the postural plan. It may be objected that a considerable portion of the tibia extends above the base of this cone, and in consequence extension cannot be made at the upper part of the bone; and further, that the prominences about the foot will not endure as much pressure as is presupposed. To these the answer is, first, that most fractures which require extension are those which override from the obliquity of the fracture, and such are almost always situated below the greatest circumference of the leg, those above this point being transverse, or so nearly so as to occasion but little displacement; and all that is required in these cases are splints of coaptation, which the leg-pieces of the leather readily furnish. If, however, it be found necessary to make extension, the prominence at the head of the tibia will be found a sufficient means for counter-extension. The second objection is disposed of by padding the leather with cotton-wool over all the prominent portions of the foot.

(To be Continued.)

THE BINOCULAR MICROSCOPE.—The binocular microscope is fast growing into favor with the microscopists of New York and the vicinity, it being pretty generally conceded that it is much superior to the ordinary single-tubed instrument. The stereoscopic effect which it is enabled to produce is truly wonderful, even with high powers. We have seen with one of Mr. Grunow's instruments the human blood-globules having that degree of projection as to appear actually tangible. The edges were rounded out to that extent that we could almost see behind them.‡

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, May 18, 1864.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

DR. NOYES exhibited a specimen of the Calabar bean, and referred to its botanical and therapeutical properties.

CANCER OF THE RECTUM.

DR. PARKER opened the discussion on cancer of the rectum. The substance of his remarks may be summed up as follows: The most frequent seat of cancer of the rectum is about one and a half inches from the sphincter, and usually gives rise to stricture of the gut at that point. The symptoms at first are exceedingly vague, there being generally only a slight sense of uneasiness about the anus, with twinging pains and some aching about the sacrum. As the disease progresses, there is an involuntary discharge of mucus from the anus, with impairment of the general health. The diagnosis is easy if the stricture can be reached with the finger. Sometimes bougies are used to detect the existence of the stricture when high up. The finger is always the best instrument if it can reach far enough.

The best position to place the patient in for examination is either lying upon the side, with thighs firmly drawn up against abdomen, or squatting upon, and over the edge of a chair. The treatment principally consists in the use of palliative measures. If the gut is occluded, the deposit may be broken down by the finger; if partially closed, injections may serve to liquefy the feces above and give an easy passage. Sometimes it is necessary to nick the edges of the stricture, and afterwards resort to *gradual* and *careful* dilatation with a bougie. Active or forcible dilatation is always bad, as it may cause a rupture of the gut and peritonitis. Amusat's modification of Calisen's operation is sometimes resorted to.

DR. POST referred to a case of cancer of the rectum, in which there was entire occlusion of the gut for twenty-nine days. He had seen but one such case. In most instances nature liquefied the feces, and a diarrhœa often alleviated the distressing symptoms. He had known of some cases where the disease had existed for a long time, and caused a large deposit in the intestine without occasioning any inconvenience.

FISTULA IN ANO.

DR. POST then proceeded to offer a few remarks on the subject of fistula in ano. He divided fistulæ into three classes—1. Complete; 2. Incomplete external; and 3. Incomplete internal. He believed that in very many of the cases that were supposed to be of the incomplete external variety, an internal opening could be found, if the probe was made to search for it lower down than is usually done. He advocated the use of a probe provided with a handle, as the instrument by that means was prevented from twisting itself as it followed the tortuosities of the fistulous tract. In most of the instances, he had found the internal opening of the fistula so near the anus, that the point of the knife could be made to pass through it out of the anus; the parts could then be divided by a cutting process, and this is by far less painful than the ordinary method.

DR. PARKER asked if the ligature had been often used by the members for the treatment of such cases.

DR. PEASLEE stated that he had made use of the ligature in probably ten cases, but on account of the tediousness of the cure, and the want of that uniform success which some claimed for it, he had abandoned it for the knife.

DR. UNDERHILL had seen the ligature tried, but with no good effect. He much preferred the knife.

DR. PARKER uses the ligature in cases where the fistula is superficial, but prefers the knife for those that are deeply seated.

DR. HUTCHINSON favored the use of the ligature, even when there was a very considerable amount of tissue to cut through. He advocated its employment, especially in cases where there was a tuberculous diathesis present, and where it was necessary that the cure should be a gradual one.

DR. FOSTER referred to the case of a medical man who was cured by the ligature without the loss of an hour's time. There was no pain or inconvenience attendant upon the treatment.

DR. GARRISH preferred the knife for the superficial fistula, but relied upon the ligature when considerable tissue had to be divided, because he thought that hæmorrhage by that means could be prevented.

DR. BATCHELDER recommended the use of the sponge-tent in the treatment of stricture of the rectum.

DR. FOSTER offered some resolutions concerning the death of DR. M. E. WINCHELL, after which the Academy adjourned.

NEW YORK PATHOLOGICAL SOCIETY.]

STATED MEETING, January 13, 1864.

DR. D. S. CONANT, PRESIDENT, IN THE CHAIR.

ANEURISM OF THE ASCENDING AORTA, ETC., ETC.

DR. FLINT presented three specimens. The first consisted of an aneurism of the ascending aorta, insufficiency of the aortic valves, with hypertrophy, and dilatation of the left ventricle. The cavity of the aneurism contained no fibrine, but abundance of calcified plates. The patient was admitted into Bellevue Hospital two months ago, and while there was attacked with typhus, and died. The diagnosis of the cardiac trouble was readily made out.

AORTIC ANEURISM AND ANEURISM OF THE LEFT CORONARY ARTERY.

The second specimen was one of commencing aortic aneurism, but inasmuch as the patient died suddenly shortly after admission into the hospital, no history of his case could be ascertained. The left ventricle was hypertrophied and dilated, the dilatation predominating over the hypertrophy. There was considerable dilatation of the aorta, and also a rather abundant deposit of calcareous matter. Some aortic insufficiency was also noticed, but the point of interest in the specimen was the existence in the left auricle of a calcareous tumor, the size of a hickory nut, on the projecting part of which the endocardium was removed. The interior of this tumor contained coagula, which belonged to an aneurism of the left coronary artery.

The case, as far as this latter condition of things was concerned, was to Dr. Flint a unique one. The calcareous degeneration prevented a rupture of the aneurism, but an interesting question presents itself—What would have been the ultimate result had the walls of the sac given way, and thus virtually opened a communication between the affected artery and the cavity of the left ventricle? The substance of the heart would certainly have been deprived of part of its supply of blood.

DISEASE OF THE AORTIC AND MITRAL VALVES.—MITRAL DIRECT MURMUR.

DR. FLINT presented the third specimen, in order to place upon record some remarks with regard to the mitral direct murmur.

The heart was taken from a patient, a female, æt. 40, who died at Bellevue, having been under observation for three years. She had three murmurs, the aortic direct and regurgitant, and the *mitral direct*.

Concerning the very existence of the mitral direct murmur, Dr. Flint remarked that there had been a considerable amount of discussion in this city, but he wished to present this as a case in point, and one which a great number of medical men, together with his private classes, had had an opportunity of seeing. He was strongly inclined to think that the direct murmur was often confounded with the

mitral regurgitation, inasmuch as he was satisfied that the former was not so rare as those who believed in its existence were in the habit of supposing it to be. The distinctive points connected with this murmur are, that in the first place it immediately precedes the systole, and is instantly arrested on the contraction of the ventricle—in other words, it is pre-systolic; secondly, there is a distinct interval between the ending of the second sound and the commencement of the murmur. The murmur is usually a rough one. Dr. Flint was aware that he had stated the contrary to be the case in his book, but a more extensive experience with the murmur enabled him to correct the error there made. It has a peculiar vibratory, or “blurring” character, the sound much resembling that produced by throwing the lips and tongue in vibration. The conditions which are necessary for its production are obstruction of the mitral orifice and flaccidity of the mitral curtains. In this specimen the mitral orifice is contracted to the “button-hole slit.” The auricle, contracting just before the ventricle propels the blood through this contracted orifice, throws the valve into vibration just previous to the systole. This murmur may exist without organic disease of the mitral valve, simply as the result of insufficiency of the aortic valves. As the result of the regurgitation, we have the ventricle, immediately after contraction, sufficiently filled with blood to float up the mitral valve far enough to be thrown into vibration by the auriculo-ventricular current.

In connexion with Dr. Flint's second specimen, Dr. Post remarked that there was a specimen of coronary aneurism in the Museum of the New York Hospital; he did not, however, recollect as to whether its walls were composed of calcareous matter.

Dr. SANDS referred to a case of mitral direct murmur, which he had met with while an interne in Bellevue Hospital. The relation of the murmur to the first sound could clearly be made out.

In answer to questions from Drs. Bibbins and Jacobi, Dr. FLINT made some explanatory remarks concerning the general characters of the mitral direct murmur.

(To be Continued.)

American Medical Times.

SATURDAY, JUNE 4, 1864.

MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

THE assembling of the AMERICAN MEDICAL ASSOCIATION in this city during the ensuing week must prove one of the most interesting, as well as important events in the current history of the profession. Though feeble in its beginning, and exercising only very limited control over the great mass of medical men, the Association gradually grew in power and influence, until, at the commencement of the Rebellion, it had achieved a position little if any inferior to that of a legislative body. Its decisions on all matters pertaining to the ethics of the profession, to medical education, to the character of the schools, etc., were received as final, and respected as authority. It had, in fact, become, as its friends were proud to designate it, the National Medical Congress. The Association was the only voluntary national organization at the outbreak of the war which remained in all its integrity, in spite of the growing sectional feeling which had violently thwarted all other efforts at national brotherhood. We are not aware that the medical profession of the Southern States have entertained other than the kindest feelings towards this great central organization; and its power must be considered, therefore,

as simply suspended, as were its annual meetings, by our civil dissensions.

Every medical man, solicitous for the honor, dignity, and progress of his profession, seems cordially to welcome the return of the annual meetings of this Association. Like the French and English national associations, it gives compactness and uniformity to the great mass of medical minds, and concentrates their sympathies and efforts on all reforms and improvements. But the American Medical Association serves a still higher and nobler purpose than other similar societies. It is our Court of Appeal in all questions relating to medical ethics, the status of schools, individuals, voluntary organizations, etc., etc. Such an organization is eminently necessary to preserve the integrity and harmony of the profession. England has its Medical Council, which under the statute legislates with the power of a corporate body, and this is in accordance with her institutions. But the nearest approach to such a medical governing body we can attempt, is a voluntary organization which carries sufficient inherent moral force to render its decrees binding. Such is the position attained by the American Medical Association, and such is the character with which every one should strive to clothe it; to this end we must foster its growth, and the extension of its influence. Every question affecting the great body of the profession, and every cause of dissension that cannot be settled by local societies without creating discord, should be referred to this body, and its decisions should not only be respected but faithfully followed. Thus the Association will truly become a great National Medical Congress in which every interest is represented, and whose annual legislation will elevate, purify, and strengthen the profession, and bind more closely the bonds of fellowship.

The division of labor by the organization of sections was dispensed with at the last meeting. At the previous meeting at New Haven these sections had been found to work well, giving larger scope and more thoroughness to the discussions. There can be no doubt that if properly managed the sections will be found an essential part of the scientific proceedings of the Association. They admit of the reading of papers which would otherwise be noticed only by their titles, and give ample opportunity for the consideration of the practical or theoretical questions which are presented.

The necessity of a permanent Secretary becomes more and more evident as the business of the Association accumulates. Under the present system it is quite impossible to secure the despatch that is required. The important duties of the Secretaryship, resting upon two persons widely separated, and frequently not acting in harmony, can never be faithfully discharged. The whole responsibility of this office should be placed upon a single person, and he should be held rigidly accountable for the prompt and correct fulfillment of his obligations. The office should be permanent, or at least should continue for a number of years, in order to render the Secretary entirely familiar with the business matters of the Association. The brief term of a year does not permit of any preparation, and whatever qualifications the Secretary may have, natural or acquired, they do not seem to render him a capable officer at once. As this office, well discharged, can be no sinecure, the permanent Secretary should be liberally paid. The Association is now able to give a high character to its permanent officers, and in no way can it do so more advantageously and justly than

by placing its Secretary upon a firm financial basis. If it is decided at the present meeting to establish a permanent Secretaryship, we trust the Association will exercise more than ordinary care and discretion in the selection of this officer. He should be a man of elevated character and reputation in the profession, of great business habits, sincerely devoted to the interests and welfare of the profession, and resident at some accessible point. No mere parvenu should be allowed to attain to an office of so much importance to the future success of the Association. Men of high position can be found who will fill the situation with dignity and with honor.

An effort was made at the last meeting to secure the adoption of a rule prohibiting the selection of a president from the locality where the session of the Association is held. We are not aware of the considerations which prompted the advocates of this proposition, and can treat the question only in its abstract sense. In every view that we can take of it such a rule is uncalled for, and would be both unjust and unwise. It is uncalled for, because there has not been a settled policy on the part of the Association to select its President from the locality where the sessions are held. At meetings previously held in New York and elsewhere, the President has been chosen from other localities. In the instance of the session in this city, the claims of several of the most eminent members of the profession, resident in New York, were disregarded, and PROF. KNIGHT, of New Haven, was elected. Such a rule will frequently operate very unjustly by preventing worthy men from enjoying the honors of the Association. The position of PRESIDENT is no mean distinction, and there are few who do not esteem it worthy of the highest ambition. Finally, any such limitation of the Association in the selection of its officers would be unwise and impolitic. This body should be entirely free, as should every voluntary organization, in the selection of a presiding officer.

Many subjects of great general interest to the profession, as medical education, examining boards, specialism, etc. etc., will be brought forward for discussion and adjudication. Subjects also of more immediate interest to the army medical service will probably be introduced, and the opinion of the Association will be solicited. It is not our province to discuss these questions in advance, but we may state that they should all receive full and impartial consideration. The Association should pass no matter by unnoticed, or slighted, which has been respectfully referred to it for a decision. Nor should its decisions be hastily given without due discussion and investigation. If its conclusions are to be respected they must be based upon an impartial as well as thorough and exhaustive examination. Most questions should be referred to committees to report at a subsequent meeting, thus giving ample time for investigation.

In behalf of the profession of New York we most cordially welcome the delegates and members of the Association to this city. As it was here that the first steps were taken in its organization, and that its largest and most enthusiastic meetings have been held, it is eminently proper that New York should give the Association renewed life after a season of suspended animation. Every needful effort has been made by the profession of this city to render the session pleasant and profitable, and we anticipate being called upon to chronicle the proceedings of one of the most successful meetings of this body ever held.

THE TRANSFER OF THE SEVERELY WOUNDED.

WE are glad to learn that the severely wounded are to be transferred to the hospitals throughout the North and East, and have no doubt but that the move will be attended with great benefit. It has heretofore been the practice of sending North crowds of incorrigible malingerers, who manage by well contrived artifices to be on the sick list for months at a time. The fact is, this class of individuals are determined *never* to get well of their various pains and aches so long as they can be near enough to their homes to get to them on passes, or to receive visits of sympathizing relatives and friends, or occasionally to rusticate on a furlough. It is on account of such inmates as these that the General Hospitals of the North have acquired the unenviable reputation of demoralizing the army by affording places of refuge for so large a class of cowards. This could all be remedied by keeping such patients as near to their commands as possible, and have their places in our wards supplied by men who, by virtue of their honorable wounds or severe indispositions, are entitled to all the advantages which a Northern climate can confer. To such deserving ones the proximity of their friends acts beneficially and tends greatly towards a rapid recovery. They are either too sick or too badly wounded to be constantly asking for furloughs, and are content patiently and quietly to submit to treatment. If we have our hospitals well filled with such as these, we can answer for it that the lumbagoes, rheumatic attacks, and side-aches can be as well, and a great deal better, treated further from home. As an example of the beneficial effects of climate upon disease, we need only instance that of chronic diarrhoea, which, as is well known, sometimes only requires northern air to establish a cure. We see no reason, either, why wounds should not heal quicker under the same influences. In properly constructed vessels, the transportation to New York and the vicinity is easy, and we understand that such transports are being rapidly fitted out, each supplied with a competent surgeon-in-charge. We are exceedingly anxious to see the experiment tried, as we are confident of its success. There are a number of hospitals throughout the Department of the East, which, by their location and surroundings, are peculiarly adapted for the reception of such severe cases as may be sent.

OUR CONTENTS.

WE have no doubt but that our readers will be edified by the perusal of the lecture by DR. PARKER in our present number, as also of the report of PROF. NOEGGERATH'S Clinic. We are happy to state that both these gentlemen intend in future to contribute more or less regularly to our columns. The remaining portion of the journal also contains interesting articles, each of which will show its special claims to attention after having been read.

THE PAY OF ACTING ASSISTANT-SURGEONS.

ON account of the present depreciation in paper currency, the pay of our Surgeons is necessarily narrowed down to quite a small figure, and the Acting Assistant Surgeons, who, as far as remuneration is concerned, are at the bottom of the list, necessarily suffer the most. This being the case, we can easily understand why the demand for this class of medical laborers is still urgent. Until the Government chooses to increase the pay, it cannot expect to have its wants supplied. No respectable practitioner can, for

simply a hundred dollars a month, be tempted to leave his business for any length of time, even for temporary service; and the hospitals of the country will necessarily soon get filled with young irresponsible medical striplings. If the Government wishes first-class men it must pay first-class prices.

NEXT PRESIDENT OF THE ASSOCIATION.

THERE is already an active canvass of the claims of members for this high position. A number of names have been suggested, and each has its special and earnest advocates. But there is one name which transcends all others, and to which we must accord the most profound respect. It is the name of MOTT. He whose life is contemporaneous with American surgery, and whose genius has done so much to advance it and give it an exalted position among foreign nationalities, still lives among us, hale and hearty, and as much alive to the interests of the profession as when he commenced his career, half a century ago. His name cannot be rendered more illustrious or his fame more enduring by any honors which we may bestow; but we believe the Association might well be proud hereafter to point to the name of MOTT among her Presidents.

Reviews.

TRANSACTIONS OF THE ILLINOIS STATE MEDICAL SOCIETY, FOR THE YEARS 1861, '62, AND '63.

THE eleventh annual meeting of this Society was held in Jacksonville, May 5th, 1863. The first paper is a Report on Typhoid Fever, by H. NOBLE, M.D., of Heyworth. His opinion is, that the disease is located especially in the mucous coat of the intestines, but not necessarily associated with ulceration of Peyer's glands, or any other tissue. In the fatal cases he has seen death result from perforation of the intestine, exhaustion of the vital forces, or from the complication of other diseases. He does not believe in *curing*, as some do, in from four to six days, but directs his treatment first, to the correction of the supposed lesion of the intestines, and next to sustaining the patient. After evacuating the bowels with a mercurial, combined with from one to three grains of quinine, he gives nitric acid, diluted to about the strength of good vinegar, in teaspoonful doses, repeated in four or six hours. Should the tongue become red and shining, the natural color is restored by the use of turpentine, in doses of from twenty to sixty drops, from two to four times a day, when the acid is resumed, and continued until convalescence is established. If the secretions become deranged, they are restored by calomel.—*Report of the Special Committee on Diseases of the Eye*, by E. L. HOLMES, M.D., of Chicago, is an account of some of the diseases coming immediately under the notice of the Committee, no communication having been received from any member of the Society.—*Minor Mental Maladies*, by ANDREW McFARLAND, M.D., embraces some account of those numerous vagaries we meet with, whether social, political, or religious; and while "Moral Insanity," as a plea to screen villany, is denounced, the author believes that the physician too often overlooks an incipient mental malady, which would mitigate some minor offence for which the accused suffers punishment.—*Report of the Committee on Surgery*, by PROF. E. ANDREWS, of Chicago, recounts some of the recent improvements made in civil surgery, especially in the treatment of fractures, and gives some account of the military practice seen by a portion of the Committee.—*Delayed Union of Fractures, with Cases and Illustrations*, by DAVID PRINCE, M.D., is a brief resumé of the different methods of treating this accident; with a

history of a case successfully treated by drilling, followed by compression of the fragments by means of Malgaigne's spike, drilling employed by itself having proved unsuccessful.

Correspondence.

FREDERICKSBURGH.

Special Correspondence.

By direction of SURGEON-GENERAL QUACKENBUSH of the State of New York, the following surgeons of New York City reported on the 10th inst. to SURGEON-GENERAL BARNES, at Washington, for duty at Fredericksburgh, Va., viz. DRS. GURDON BUEK, WM. DETMOLD, H. B. SANDS, STEPHEN SMITH, FRANK H. HAMILTON, and T. C. FINNELL. From Washington to Belle Plain they were accompanied by COL. CUYLER, Act. Med. Inspector-General, who visited the latter place to facilitate the transfer of the wounded. The wounded had just begun to arrive at this point, and as there was neither house nor wharf, it required all the efforts of this energetic officer to introduce any system into the chaos that reigned on his arrival. All the soldiers who reached this point were but slightly wounded, and most of them had walked from Fredericksburgh, about ten miles distant. Belle Plain is but a landing at the mouth of Potomac Creek, without a house or sign of habitation. The Sanitary and Christian Commissions had preceded us, though we were but a few hours later than the first boat that reached the place, and had established their kitchens and were busy feeding the weary and exhausted multitudes which constantly streamed over the hills. A ride of four hours over a most disagreeable road brought us to Fredericksburgh at six o'clock P.M. of the 12th inst., where we reported to SURGEON E. B. DALTON, Medical Director.

There were at that time not far from four thousand wounded in the city, scattered throughout all the available buildings, as churches, hotels, stores, warehouses, etc., etc. On first entering these suddenly extemporized hospitals, we were struck with the utter destitution of all medical and hospital supplies. The patients lay thickly upon the floors, with only their dirty, tattered, blood, and pus-besmeared garments under and around them, and neither bandage, lint, nor old linen could be obtained to dress their offensive wounds. There was also great destitution of food, especially such as the severely wounded require. There can, however, be no blame attached to the Medical Department for this absence of hospital supplies. It was the design of the military authorities to gather the wounded at Rappahannock Station, and transport them by railroad to Washington, but the first train was intercepted by the rebels, and compelled to turn back. It was only after repeated attempts to reach a railroad station that it was decided to go directly to Fredericksburgh, which was then picketed by the rebels. This town had been stripped of everything available for the sick by the rebels, and the nearest point at which supplies could approach it by water was Belle Plain. To notify the authorities at Washington that Fredericksburgh was to be the dépôt for the wounded, to ship and unship supplies to Belle Plain, and to transport them over a most difficult road, necessarily required time. Every effort was, however, being put forth by the Surgeon-General to forward rapidly the requisite material. It should be added, also, that as soon as the Fredericksburgh road was opened it was occupied, as was the wharf at Belle Plain, by the ordnance trains of the army, to the exclusion for two days of the medical train.

The Sanitary Commission, however, with that lightness and fleetness which characterize all its movements, pressed through three wagon loads on the second day, and almost immediately began to distribute the precious gifts to the suffering. On the following days its supplies came in in greater abundance, and relieved the immediate wants. It

was interesting to notice the affection of the soldiers for this great charity. It was a common remark among the wounded, "If the Old Sanitary is around we shan't suffer."

The Christian Commission was also early on the ground, and furnished a large variety of indispensable articles. Its agents visited the hospitals with pitchers of milk-punch, which was very grateful to the severely wounded.

Whatever may be said against these organizations, they are truly worthy of the earnest support of the people. They furnish aid that does not come within the duties of the Medical Department, and they were certainly on this occasion earlier on the ground than the latter.

MAY 15, 1864.

Army and Navy Intelligence.

CIRCULAR LETTER.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., May 26, 1864.

The following Order from the War Department is respectfully furnished for your information and guidance:

WAR DEPARTMENT,
WASHINGTON, D.C., May 20, 1864.

Accounts for newspaper advertising for the Bureau of the War Department must be rendered in duplicate, and state upon their face—

- The name of the publisher or firm;
- The name of the newspaper, and the place where published;
- The dates between which inserted;
- The amount of matter and number of insertions charged for, and rate per square or line; and must be accompanied by a full schedule of the customary advertising terms of the newspaper, unless the same shall have been previously filed with the Assistant Secretary of War.

Accounts must then be verified by the officer by whom the advertisements are signed, stating that the publication was authorized by him, and the number of insertions ordered.

Advertisements copied from other papers, *without authority*, will not be paid for.

The attention of officers is directed to the fact that the practice of ordering advertisements to be inserted "till day" of sale, etc., involves a useless expenditure, in cases where the station of the officer is remote from the place of publication.

Officers issuing advertisements for publication will, at the same time, transmit copies of the same to the Assistant Secretary of War, stating the newspapers in which they are to be published, and the number of insertions ordered; and whenever only a portion of the official newspapers in any locality are selected to publish any advertisement, the officer will state his reasons for selecting the particular papers in question, and also his reasons for not advertising in the other official papers in that locality.

By order of the Acting Surgeon-General:
(Signed) C. A. DANA,
Assistant Secretary of War.

By Order of the Secretary of War:
C. H. CRANE,
Surgeon, U.S.A.

(GENERAL ORDERS, No. 198.)

WAR DEPARTMENT, ADJUTANT-GENERAL'S OFFICE,
WASHINGTON, D.C., May 12, 1864.

Duties of Assistant Surgeon-General:

To facilitate the prompt transmission of medical supplies to points developed by emergencies, secure the proper distribution and presence of medical officers and their assistants where their services are most required, and to provide comfortable, abundant, and available hospital accommodation for the sick and wounded of the Armies of the West and South-west, the office of the Assistant Surgeon-General is established at Louisville, Ky.

To fully accomplish these important objects, Assistant Surgeon-General R. C. Wood will have immediate control, under the general direction of the Surgeon-General, of the Medical affairs in the Military Department of the North-west, the Northern Department, the Department of Kansas, Missouri, and those composing the Division of the Mississippi, except that officers assigned to duty with any Army or Department will not be removed therefrom, unless by order of the War Department.

The orders, circulars, and instructions heretofore published by the Assistant Surgeon-General, and such as may in future be required, will be obeyed and respected by all under his jurisdiction.

By Order of the Secretary of War:
E. D. TOWNSEND,
Assistant Adjutant-General.

Official:

ORDERS, CHANGES, &c.

MISCELLANEOUS.

Surgeon R. D. Lynde, U.S.V., has been ordered to Washington as a witness before a military commission.

Surgeon A. M. Clark, U.S.V., has reported for duty to General Butler, at Bermuda Landing.

Surgeon N. K. Derby, U.S.V., was wounded at the battle of Cane River, while Medical Director to the Red River expedition.

The Fort Schuyler General Hospital, at New York, and the General Hospital, at Chester, Pa., have been re-transferred to the Medical Department.

Surgeon J. J. De Lamater, U.S.V., has reported for duty at Fort Monroe, Va.

Surgeon R. Nicolls, U.S.V., has reported for duty to Assistant Surgeon-General Wood, at Louisville, Ky.

Surgeon C. F. H. Campbell, U.S.V., is sick at his home in Philadelphia, Pa.

The U. S. Barracks at Augusta, Me., have been turned over to the Medical Department for a hospital.

A hospital of the capacity of five hundred beds is being fitted up at Montpelier, Vt.

Surgeon G. H. Hubbard, U.S.V., has been ordered to resume his duties as Medical Director, District of the Frontier, Fort Smith, Ark.

The Barracks at Willett's Point, N. Y., those recently occupied by the 1st D. C. Cavalry, at Washington, D.C., and the District of Columbia Armory, have been turned over to the Surgeon-General for hospital purposes.

The Board of Inspectors, instituted in Special Orders 514, series of 1863, from the War Department, to inspect the Government Hospitals and Military Prisons in the Department of Washington, has been dissolved.

The General Hospital at Willett's Point, N. Y., will be known as the Grant Hospital.

Surgeon J. G. Keenon, U.S.A., has resumed charge of the Adams Hospital, Memphis, Tenn.

ORDERS.

Surgeon A. H. Thurston, U.S.V., is relieved from duty in the Army of the Potomac, and will report to the Commanding General, Department of Washington.

Surgeon G. H. Hubbard, U.S.V., is relieved from duty in the Department of Arkansas, and will report to the Commanding General, Department of the East.

Surgeon J. Leavenis, U.S.V., is relieved from duty in the Department of the East, and will report to the Commanding General, Department of Washington.

Surgeon Gideon S. Palmer, U.S.V., is relieved from duty in the Department of the Cumberland, and will report to Surgeon Josiah Simpson, U.S.A., Medical Director, Middle Department, to assume the duties lately performed by Surgeon Charles Sutherland, U.S.A., at Annapolis, Md.

Hospital Chaplain C. W. Heisly, U.S.A., will report to the Commanding General, Department of the South, to relieve Hospital Chaplain J. White, U.S.A.

Surgeon C. Sutherland, U.S.A., is relieved from duty at Annapolis, Md., and will report in person to the Surgeon-General for assignment to duty.

Surgeon Charles Sutherland, U.S.A., is assigned to duty as Medical Purveyor at Washington, D.C., to relieve Medical Storekeeper H. Johnson, U.S.A. On being relieved Medical Storekeeper Johnson will report to Surgeon Sutherland for duty.

Surgeon J. H. Peabody, U.S.V., is relieved from duty in the Department of the Missouri, and will report to the Commanding General, Department of Kansas.

Surgeon C. F. H. Campbell, U.S.V., is relieved from duty in the Department of Missouri, and will report to the Commanding General, Middle Department.

DISCHARGES, DISMISSALS, ETC.

Assistant-Surgeon N. S. Drake, 16th New York Cavalry, dismissed by sentence General Court-Martial for conduct unbecoming an officer, General Orders No. 31, Headquarters Department of Washington.

Hospital Steward John A. Seaton, U.S.A., honorably discharged.

Medical Cadet Francis P. Casey, U.S.A., honorably discharged to enable him to accept the appointment of Assistant-Surgeon, 5th New York Artillery.

Surgeon E. M. Seely, 21st Illinois Vols., honorably discharged, having tendered his resignation on account of physical disability.

Private C. C. Ela, Co. "G," 10th Maine Vols., honorably discharged to enable him to accept an appointment as Acting Assistant-Surgeon U.S.A.

Assistant-Surgeon James L. Chipman, 39th Massachusetts Vols., honorably discharged on account of physical disability, on recommendation of a Board of Officers.

Assistant-Surgeon James A. Emmerton, 23d Massachusetts Vols., and Samuel C. Whittier, 11th Massachusetts Vols., honorably discharged at the request of the Governor of Massachusetts, to enable them to accept commissions in other regiments.

RESIGNED.

Hospital Chaplain Henry Hopkins, U.S.A., to take effect May 25, 1864.

LEAVE OF ABSENCE.

Hospital Chaplain James White, U.S.A., for sixty days for the benefit of his health.

Surgeons Daniel Meeker and Charles J. Kip, U.S.V., for ten days each.

APPOINTED.

Assistant-Surgeon Lyman Allen to be Surgeon 5th Regiment U. S. Colored Troops.

Dr. William A. Spears to be Assistant-Surgeon 1st Regiment Michigan Colored Volunteers.

Charles Haslam, Robert J. Strong, W. B. Young, and T. D. Smith, U.S.V., and Henry C. Saxton, of Washington, to be Hospital Stewards U.S.A.

American Medical Association.

PROCEEDINGS OF THE FIFTEENTH ANNUAL MEETING,

HELD AT NEW YORK, JUNE 7th, 8th, and 9th, 1864.

TUESDAY, JUNE 7TH—MORNING SESSION.

THE Association met pursuant to regulations at eleven o'clock Tuesday morning, June 7, 1864, at Irving Hall, New York, and was called to order by the retiring President, Alden March, M.D., of Albany, supported by retiring Vice-Presidents, Dr. John Cooper, of Delaware; Dr. David Prince, of Illinois; Dr. C. C. Cox, Surg. U.S.V. The Secretaries, Drs. H. A. Johnson of Illinois, and Guido Furman of New York, were also present.

Prayer was offered by the Rev. Dr. De Witt of New York, after which Dr. JAMES ANDERSON of New York, Chairman of the Committee of Arrangements, welcomed the delegates and members, and made the following report:

MR. PRESIDENT AND DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION—GENTLEMEN:—In the discharge of the duty devolved upon me as Chairman of your Committee of Arrangements, it affords me great pleasure on this, the fifteenth anniversary of the Association, in behalf of your committee as well as the profession in general, to extend to you a cordial welcome. This organization, whose germ was first developed in the Medical Society of the State of New York, was perfected on the seventh of May, 1847, by the election of the venerable Dr. Nathaniel Chapman of Philadelphia as its first President, since which time its meetings have been held in nearly all the prominent cities of our country. Its sole object has ever been the elevation of the dignity and usefulness of the profession, in the endeavor to obtain which it becomes us individually as well as collectively, by our advice and example, to stimulate each other to higher attainments, and by our conduct to command respect. It is now eleven years since your last meeting in this city, around which occasion cluster many pleasant reminiscences, saddened only by the absence of some of the brightest names among your ranks, who have passed to their silent resting-place—names which gave dignity to your body and wisdom to your counsels. Your Committee of Arrangements, in due time after their appointment in Chicago, organized and invited a representation from the hospitals, colleges, and medical societies of this city and Brooklyn, for the purpose of eliciting a united expression and procuring a more extensive and general welcome to this national reunion, and have matured such plans as it is hoped will render your stay both instructive and interesting. Guide-books will be furnished to each delegate, with a programme comprising a variety of intellectual as well as social amusements. Among the institutions which have sprung up since your former visit may be noticed St. Luke's Hospital, on the Fifth Avenue, with a full and efficient medical staff; also a medical college under the auspices of the Commissioners of Charities and Corrections, and in connexion with the Bellevue Hospital and Alms-House; and in time, through the liberal bequest of the late Mr. Roosevelt, a third hospital will be added to the list. There is a feature, Mr. President, in your present assembling, of deep interest and solemn regret. I allude to that profound silence of several, and the diminished response of other States, which will appear upon the calling of the roll. It would not be proper on this occasion, nor becoming the circumstances under which I appear before you, to allude to its cause. Let us trust, however, that, through the interposition of an all-wise and overruling Providence, the time is not far distant when we may again offer to our alienated brethren the hand of professional fellowship which it is our privilege to extend to you this day. I again welcome you all to this metropolis.

On motion, the report was received and adopted. Dr. Anderson, on behalf of the Committee, suggested that the

Association should hold two daily sessions during Tuesday, Wednesday, and Thursday—one in the morning, from ten to half-past one o'clock P.M.; and one in the afternoon, from three o'clock until such time as was the pleasure of the body to adjourn. On motion, this suggestion was ordered to be embodied in the report.

Surg. C. C. Cox, U.S.V., moved that Surg. Charles S. Tripler, U.S.A., be invited to a seat on the platform.

It was then moved that the Association should take a recess of ten minutes for the purpose of affording an opportunity to the delegates to select the Nominating Committee, which was carried. After the lapse of the specified time, the Committee elected reported the following names:

J. C. Weston, Maine; Thos. D. Marshall, N.H.; J. N. Stiles, Vermont; Horatio R. Storer, Mass.; Johnson Gardiner, Rhode Island; E. H. Catlin, Conn.; Jas. P. White, New York; L. A. Smith, New Jersey; A. Nebinger, Penn.; F. E. B. Hintze, Maryland; Henry F. Askew, Del.; B. B. Leonard, Ohio; Jas. F. Hibbard, Ind.; Wm. H. Byford, Ill.; S. G. Armor, Mich.; J. H. Bartlett, Wis.; A. E. McCurdy, Iowa; Geo. W. Phelps, Mo.; Noble Young, D.C.; Thos. Antisell, U.S.A.; and Thos. L. Smith, U.S.N.

RETIRING PRESIDENT'S ADDRESS.

DR. ALDEN MARCH was next requested to read his retiring address as President of the Association. His subject had reference to the elevation of the standard of the profession by a thorough and proper medical education. After a few general and preliminary remarks, and the rehearsal of the views of many of those who had devoted considerable time and attention to the theme, he set forth its claims upon the consideration of the Association as a body, and urged the importance, in the first place, of a fitting preliminary education, as the grand foundation-stone upon which to rear the superstructure, and contended that every candidate for the honorary degree of Doctor of Medicine should be required to attend three full courses of lectures, instead of the two usually prescribed. If this plan were carried out, he had no doubt but that the time of study thus increased would afford the student an opportunity to digest more fully the great principles of our art as given to him in the lecture-room. Too many of our young men, in his opinion, were allowed to graduate, who, for want of these very opportunities, suffered from a mental indigestion which troubled them more or less through their whole professional career, and prevented them from applying the great truths of science to every-day practice with that degree of satisfaction which was the only sure forerunner of advancement and success. If each course should only comprise a period of four months, he thought that the entire time of attending lectures, extending, as it should, over a period of three years, would be more than equivalent, in point of actual benefit to the student, to the ordinary two full courses of six months each.

DR. WILSON JEWELL, Pa., moved that a vote of thanks be tendered to Dr. March for his able and interesting address, and that he be requested to furnish a copy for publication.

The Association then adjourned till three P.M.

TUESDAY—AFTERNOON SESSION.

The Association was called to order by the President, after which the minutes of the previous session were read by the Secretary. The names of registered members were next read.

OFFICERS FOR THE ENSUING YEAR.

The Nominating Committee then made the following partial report:—

President, N. S. DAVIS, of Illinois.

Vice-Presidents, { W. S. MUSSEY, Ohio.
WORTHINGTON HOOKER, Conn.
WILLIAM WHEELIN, Ind.
F. E. B. HEINTZE, Md.

Secretary, GUIDO FURMAN, N. Y.

Treasurer, CASPER WISTER, Pa.

The Committee recommended Boston, Mass., as the place for holding the next annual meeting.

DR. GRISCOM, N. Y., moved that the report of the Committee be laid upon the table in order to discuss the following proposed amendments to the plan of organization:—

1st. Providing for the appointment of one permanent Secretary. 2d. That the President and Vice-Presidents of this Association elected each year shall assume the functions of their respective offices at the beginning of the meeting of the year next succeeding their election.

This motion, however, was, after much discussion, finally lost.

DR. RAPHAEL, of New York, then moved that the report of the Nominating Committee be recommitted, with instructions that two Presidents be nominated instead of one, and that the one who should receive the majority of the number of votes cast should be declared elected.

A lengthy discussion then ensued as to the propriety of the measure, and it was eventually voted down.

The question for the adoption of the report of the Committee was next put and carried.

On motion of DR. GRISCOM of New York, the President and Vice-Presidents were duly escorted to their chairs.

DR. N. S. DAVIS, on assuming his duties as President of the Association, tendered his sincere thanks for the honor conferred upon him, and asked of the members their kind coöperation in his endeavors to perform the duties of his office.

The Chairman of the Committee of Arrangements stated that invitations were extended to the members to visit the following places:—U. S. Navy Yard, Brooklyn; Greenwood Cemetery, Brooklyn; Collegiate and Polytechnic Institute; Long Island College Hospital; U. S. Naval Hospital, Brooklyn; U. S. Soldiers' Depot, N. Y.

The following gentlemen were announced as members by invitation:—Drs. Ed. M. Stein, G. R. Brush, P. H. Barton, D. McSweeney, H. H. Gregory, Elisha Harris, and B. Dewitt, Bradford Co., Pa.

The President appointed the following Committee to examine all voluntary communications:—Drs. A. B. Palmer, H. F. Askew, S. G. Hubbard.

DR. CYRUS RAMSAY, N. Y., moved that the regular order of business be suspended, and that the proposed amendments of the Constitution be taken up. Which was carried, and the following amendment introduced:—

AMENDMENT OF THE CONSTITUTION IN RELATION TO PERMANENT SECRETARY.

It is hereby ordained that Article 4, Sec. 1, of the Constitution be amended as follows:—From the 2d line strike out the words "two Secretaries," and insert "one Permanent and one Assistant Secretary;" and in the 5th line after word "officer," insert the words "except the Permanent Secretary;" also add to the same section the following: "the Permanent Secretary shall hold his appointment for ten years, unless sooner removed by death, resignation, or a vote of two-thirds of the members present at a regular annual meeting."

And be it further ordained that Section 5 of the same article be stricken out, and the following substituted in its place, viz.: "The Permanent Secretary shall record the minutes and authenticate the proceedings, give due notice of the time and place of each next ensuing annual meeting; notify all members of Committees of their appointment and of the duties assigned to them; hold correspondence with other permanently organized Medical Societies both domestic and foreign; serve as a member of the Committee on Publication; see that the published Transactions are promptly distributed to all the members who have paid their annual assessment, and carefully preserve the Archives and unpublished Transactions of the Association.

The Assistant Secretary shall aid the permanent Secretary in recording and authenticating the Proceedings of the Association; serve as a member of the Committee of

Arrangements, and perform all the duties of permanent Secretary temporarily whenever that office shall be vacant either by death, resignation, or removal.

And be it further ordained, that Article 6, Section "second," be added after the word "meetings," in the second line, the following, viz.: "including the necessary expenses of the permanent Secretary in maintaining the correspondence of the Association."

After reading the amendments, DR. JEWELL of Pennsylvania moved to strike out from the last clause, "attending the regular meetings." Which motion was adopted.

DR. NEBINGER, Pa., moved to strike out the word "ten" in the second paragraph, and substitute "five." Which was lost.

DR. GRISCOM proposed to strike out all that related to a specified term of years.

The previous question being called for and sustained, the amendment of Dr. Griscom was carried.

The question recurring on the adoption of the proposed amendments as amended, it was finally carried in the affirmative.

The Association then adjourned until ten A.M. of the day following, June 8.

During the evening the members were handsomely entertained at the residences of Drs. Jos. M. Smith, C. A. Budd, Isaac E. Taylor, Gurdon Buck, and Mayor Gunther.

WEDNESDAY, JUNE 8TH.—MORNING SESSION.

The Association was called to order by the President, N. S. DAVIS, at 10 A.M.

The minutes of the previous session were then read by the Secretary, Dr. Furman, and adopted.

The following gentlemen were elected members by invitation, and were requested to take seats on the platform:—Drs. C. W. Stearns, N. Y.; C. C. Knight, New Haven; S. H. Casey, Oneonta; W. B. Southern, Mich.; Philander White, Oswego Co., N. Y.; F. L. Livingston, Barrett, Mass.; Jno. Green, Worcester, Mass.; — Noyes, Norwalk, Conn.; Thomas Cook, N. Y.

On motion, the following gentlemen were elected permanent members:—Drs. Brown-Sequard, Boston, Mass.; Jno. P. Gray, State Lunatic Asylum, Utica, N. Y.

The reports of the Standing Committee were next called for in regular order and referred to their appropriate sections.

TREASURER'S REPORT.

The report of the Treasurer, DR. C. WISTER, showed a balance on hand of \$449.02. Only about 120 copies of Volume xiv. have been sold during the past year.

REPORT ON COMPULSORY VACCINATION.

DR. JAS. F. HIBBARD, Chairman of the Committee on Compulsory Vaccination, read a report in which it was contended that the adoption of the measure was impracticable, inasmuch as it was necessary for the people to be convinced of its utility and harmlessness before they would submit. They could be properly educated in this matter by the medical profession, who should act as a unit in recommending it under all circumstances. The Committee also recommended that the daily papers throughout the Union should be requested to ventilate the matter, and use every persuasion in their power to bring the public to a proper understanding of the power of vaccination in preventing the spread of small-pox. The report concluded with the following resolutions:—

Resolved, That a committee of be appointed, to supervise and control under the direction of this Association, all matters pertaining to general vaccination.

Resolved, That a committee of be appointed in each State to superintend the measure in its State, which committee shall be subordinate, auxiliary, and advisory to the Central Committee.

Signed,

JAS. F. HIBBARD, *Chairman*.
WILSON JEWELL.
JNO. H. GRISCOM.

Adopted, and referred to the section on Public Health.

DR. H. H. CHILDS, of Mass., was invited to take a seat on the platform.

MEDICINES AND SURGICAL APPARATUS FOR THE WOUNDED AND SUFFERING IN THE SOUTH.

DR. A. K. GARDNER, of N. Y., offered the following:—

Whereas, It is the duty and great distinction of Christian nations, and in conformity with the highest instincts of humanity, to assuage the sufferings and mitigate the horrors of war in every possible manner, in which attempt the medical profession has ever been eminently conspicuous; and

Whereas, The stringency of our blockade of the Southern coast has to a great extent deprived the sick and wounded, the feeble babe, the helpless woman, the aged man, as well as the sufferers by wounds and disease in the ranks of our enemies, of needful appliances to relieve pain and to save life; and

Whereas, From the same cause thousands and tens of thousands of our own brave sons and brothers, fighting for the holy cause of our glorious Union, and left wounded on the battle-field in the hands of the enemy, have been compelled to have operations performed without the relief and benefit which chloroform would bring, and have lain in suffering unto death in the hospitals of the South from the absolute destitution of the country of many needful medicines and instruments of surgery; and

Whereas, These articles are in no respect to be considered as among the "sinews of war," and, as has been seen, are not material to a vigorous prosecution of rebellious warfare; and

Whereas, This Association, numbering among its lawful members the medical men of the entire thirty-four States of the Union, we deem it eminently fitting that we should urge upon the Government and the people of the United States to remember the universal brotherhood of man and the undying attributes of humanity; it is therefore unanimously

Resolved, That the Association request the President of the United States to take such action as shall cause all medicines and medical and surgical instruments and appliances to be excluded from the list of articles called "contraband of war," and that such articles in any quantity may be purchased by any person in any State of the Union, and may be conveyed beyond our lines under a flag of truce, after proper inspection, so as to give every necessary comfort to relieve any human suffering, whether of our own soldiers or that of the enemy.

Resolved, That a copy of the above Preamble and Resolution be sent to the President and Heads of Departments, and to each and every member of the United States Senate, and attested by the officers of this Association; and that every member be requested to use all the influence in his power in stripping this fratricidal war of some of its unnecessary horrors, and thereby to inaugurate the re-establishment of more kindly feelings, and to smoothe away some of the obstructions to the reconciliation of our misguided brethren.

Resolved, That a Committee, representing every State of the Union here present, be appointed to present these Resolutions to the President.

On motion, the consideration of the resolutions was indefinitely postponed.

INCREASE OF RANK AND PAY OF MEDICAL STAFF OF ARMY AND NAVY.

DR. C. C. COX offered a resolution to increase the rank and pay of medical officers of the army and navy.

DR. FRANK H. HAMILTON urged the passage of the resolution by some well timed and appropriate remarks, after which the question was put and carried unanimously.

The Chair appointed a Committee, composed of the following gentlemen, to report upon the same, and prepare a memorial for the action of Congress:—Drs. McGugin, Iowa; Antisell, Washington, D.C.; F. H. Hamilton, N. Y., and Askew, of Delaware.

The Association then adjourned until 10 A. M. of Thursday, June 9.

The afternoon was occupied in the meeting of the different sections.

The entertainments for the evening were given by Drs. Willard Parker, James Anderson, Alonzo Clark, and Jared Linsley.

THURSDAY—MORNING SESSION, JUNE 9.

The Association was called to order by the President shortly after 10 A. M. The Secretary then read the minutes of the previous session, which were, on motion, adopted.

SURG. C. C. COX, the Chairman of the Committee appointed to memorialize the President of the United States in reference to the increase of rank and pay of medical officers of the army and navy, moved that DR. CHARLES S. TRIPLER be added to that Committee, and be appointed the Chairman of the same. Carried.

DR. MORAN, R. I., called the attention of the Association to the prizes offered by the Rhode Island Medical Society, and stated that they were two in number, 100 dollars each, and were open to the competition of all.

TIME OF NEXT MEETING.

On motion of DR. ASKEW, of Delaware, it was agreed that the time for the next meeting of the Association should be on the first Tuesday of June, 1865.

REPORTS OF STANDING COMMITTEES.

The reports of the Standing Committees were again called for, with the following results:—

Committee on Insanity.—DR. R. HILLS, of Ohio, the Chairman of the Committee, in a note addressed to the Association, reported progress and asked for further time, promising an elaborate report if such a privilege were granted.

It was then carried that the time should be extended; and on motion of Dr. Griscom, Dr. E. H. Van Duser, the Medical Superintendent of the State Lunatic Asylum, Kalamazoo, Mich., was added to the Committee.

Committee on Prize Essays.—The Chairman of the Committee not being present, the calling for the report was deferred.

REPORTS OF SECTIONS.

DR. S. W. BUTLER, of Philadelphia, the Chairman of the Section on Medical Topography and Epidemic Diseases, presented a report, which was adopted in full, and the following gentlemen were appointed as members of the Committee to carry out the spirit of the resolutions appended to report of the Committee on Compulsory Vaccination:—Drs. A. N. Bell, Brooklyn; J. P. Loines and H. D. Bulkley, N. Y.; A. Nebinger, Philadelphia; and J. F. Hibbard, Ind.

The Section on Surgery and on Practical Medicine and Obstetrics made no report at this period of the proceedings.

REPORT ON THE PRACTICAL WORKINGS OF THE U. S. LAW RELATING TO THE INSPECTION OF DRUGS AND MEDICINES.

DR. SQUIBB, the Chairman of the Committee on the Practical Workings of the U. S. Drug Law, made a statement to the effect that the gentlemen who composed that Committee could not agree upon the report prepared for their action; and, inasmuch as at the time it was presented for their consideration there was not opportunity for an interchange of views upon the subject, they respectfully requested that, as a Committee, they should be discharged.

On motion of DR. GARDNER, the report of the Committee was accepted and the Committee discharged.

DR. SQUIBB then proceeded, by invitation, to present his views upon the subject, in the form of a voluntary communication. He contended that the practical working of the law was to all intents and purposes a dead letter, and that the Secretary of the Treasury had not acted upon the earnest solicitations of the Committees from the different Societies and Colleges in New York who had been appointed to memorialize him upon the subject, but had made an appointment without qualifications, which could be ascertained at the time, or which have since been manifested in the duties of the office, since drugs of very inferior quality were constantly passed through the Custom House. As an example he instanced several articles, among which were those of jalap and scammony, which were, on examination, found to contain a very small per cent. of active principles—much below that which the law prescribed. He threw out the suggestion that, considering the facts of the appointment of the present inspector, it would be of little use to make any further requests to the appointing power.

In conclusion, he stated that he alone was responsible for the statements contained in the paper, and that Dr. Bowditch, one of the Committee, declined to sign a report which he considered of a partisan character, reflecting upon the officers of the General Government at the present time. Dr. Carson, the other member of the Committee, did not wish, as a matter of principle, to sign a paper until he was satisfied, from personal observation, that all the statements therein contained were correct.

After some discussion, the report of Dr. Squibb was accepted, after which

DR. S. R. PERCY, of New York, remarked that Dr. Squibb had labored under a false impression in making the state-

ments contained in the paper; and further stated that the appointment of Drug Inspector was made by Secretary Chase in perfect good faith, and with the conviction that it would meet the end for which such an appointment was designed. That gentleman had made diligent search for the right man, and, as the result of very numerous recommendations from reliable men of the profession, had selected the present incumbent. Concerning the honesty of the present Inspector, Dr. Percy was prepared to vouch, from a personal knowledge of that gentleman's character, and he could confidently assert that every endeavor had been made to discharge the duties of the responsible office with fidelity. Every specimen that it was possible to examine was carefully examined before it was allowed to pass, and he could not conceive upon what foundation Dr. Squibb had made his assertions. In conclusion, he did not think it came within the province of the Association to endorse any stigmas made against any one; and as a friend to the Inspector, he felt that it was his duty publicly to defend him.

DR. SQUIBB remarked that he was not acquainted with the Inspector, and did not allude to any one by name, but he merely had presented facts which came to his knowledge, leaving the members to draw their own inferences. He only referred to the two articles, scammony and seuna, stating that he had examined specimens of the former article which contained as low as 15 per cent. of active principle, instead of 70; and of the latter article, which contained from 10 to 55 per cent. of sticks and stones, and which in that condition had passed the Custom House.

A motion was made to refer the paper to the Committee on Publication, with discretionary power, which was lost.

DR. CURRY, of Westchester co., spoke at some length against the general practice of referring papers to the Publishing Committee, urging as an argument against it that many communications would find their way into the volume which would not be entitled to it, and thought that the Committee should have ample discretionary power in the matter. He did not wish it to be understood that his remarks referred to Dr. Squibb's paper, but only wished the principle of the thing to be discussed.

The President stated that the discretionary power belonged to the section to which any paper might be referred, and suggested the propriety of referring Dr. Squibb's paper to the Section on Chemistry.

DR. McFARLAND, New York, thereupon made a motion to refer it to that section, which was carried.

REPORT OF SECTION ON PRACTICAL MEDICINE AND OBSTETRICS.

DR. STORER, Boston, read a report of the meeting of the Section held the afternoon before, and concluded the same by presenting the following resolutions, which were appended to his paper, and which we have already alluded to:—

Resolved, That in the opinion of the American Medical Association it is expedient that there should be attached to every public hospital for the insane, one or more consulting physicians, whose appointment should be honorary, and who may be consulted at the discretion of the superintendent, such measure being alike for the interest of the hospital, its medical officers, and its patients.

Resolved, That a copy of the above Resolutions be transmitted to the Board of Trustees of each of our public hospitals for the insane, and also to the Secretary of the Association of American Superintendents for the Insane, and request that it may be endorsed by that body, the action proposed being upon the respective boards with which its members are officially connected.

DR. GRISCOM contended that the Association, by passing these resolutions, would prevent any medical man who should be so appointed from receiving any remuneration. He thought that the physician should be paid for his services, if he chose to make an arrangement to that effect with the managers of the institution; but if he was disposed to accept it as an honorary position, the matter was of course only a personal one. These being his views, he moved that the clause, "whose appointment should be honorary," be stricken out.

Remarks were made endorsing Dr. Griscom by Drs. Gardner, New York, McCarthy, Ill., and others.

The amendment was then carried, after which the resolutions were passed upon as a whole.

The report of the Section was also adopted.

THE COMPLETION OF THE REPORT OF THE NOMINATING COMMITTEE. ELECTION OF A PERMANENT SECRETARY.

Before the reading of the report of the Nominating Committee, DR. GRISCOM obtained permission to make a few remarks upon the duties which should be required of the Permanent Secretary. He considered that it was of the utmost importance that the right man should be selected for the performance of duties which involved so great responsibilities. He contended that such an officer of the society should hold regular correspondence with all the members and with all the different societies throughout the country; that he should attend every meeting; should procure a systematic reduction of fare over the different railroad lines communicating with the city in which the meeting is held; that he should give his personal attention to the sale of the Transactions, and use every endeavor to advance the interests of the Association. Such a man, in his opinion, could only be obtained by proper remuneration, and he therefore moved the adoption of a resolution to the following effect:

Resolved, That the Permanent Secretary shall be entitled to the compensation of _____ dollars per annum, payable out of any surplus funds of the Association after all other claims for each current year shall be paid.

Considerable discussion here followed as to the propriety of adopting the resolution and the amount of remuneration to be offered, when it was finally agreed to lay the matter on the table.

COMPLETION OF REPORT OF COMMITTEE ON NOMINATIONS.

The Committee on Nominations then presented the completion of their report, as follows:—

Committee on Exsection and its Connexions with Conservative Surgery (enlarged).—Drs. Sayre, N. Y., G. W. Morris, Pa., G. C. Blackman, O., S. H. Tewksbury, Me., E. Andrews, Ill., Geo. B. Twitchell, N. H., J. C. Hughes, Iowa, G. Clymer, U.S.N., J. R. W. Dunbar, Md., R. H. Gilbert, U.S.A.

On Drainage and Sewerage of Large Cities and their Influence on Public Health.—Drs. W. J. C. Duhamel, D.C., E. C. Baldwin, Md., Cyrus Ramsay, N. Y.

On Alcohol and its Relations to Man.—Dr. G. E. Morgan.

On Microscopic Observations in Cancer-Cells.—Leonard J. Sandford, Conn.

On Quarantine (continued).

On Medical Ethics.—Drs. J. A. Murphy, Ohio, M. L. Linton, Mo., B. F. Schenck, Pa., Swain Wickersham, Ill., A. J. Fuller, Me.

On the Microscope.—Dr. Jas. M. Corse, Pa.

On Relations which Electricity sustains to the Causes of Disease.—Dr. S. Little, Pa.

On the Morbid and Therapeutic Effects of Mental and Moral Influences.—Dr. A. B. Palmer, Mich.

On the Cause of Extinction of the Aboriginal Races of America (continued).

On the Causes and Treatment of Un-united Fractures.—Dr. F. H. Hamilton, N. Y.

On Diphtheria.—Dr. Lucius Clark, Ill.

On the Uses and Abuses of Pessaries.—Dr. Jas. B. White, N. Y.

On International Medical Ethics.—Drs. J. Baxter Upham, Mass., R. Thompson, Ohio., G. Shattuck, Mass., G. C. E. Weber, Ohio.

On Climatology and Epidemic Diseases.—Drs. C. W. Parsons, R. I., P. A. Stackpole, N. H., T. M. Logan, Cal., R. C. Hamill, Ill., J. C. Weston, Me., B. H. Catlin, Conn., C. L. Allen, Vt., T. Antisell, Washington, D.C., J. W. H. Baker, Iowa, Abraham Sager, Mich., O. S. Mahon, Md., J. W. Russell, Ohio, D. F. Coudie, Pa., H. Townsend, N. Y.

On Autopsies in Relation to Medical Jurisprudence.—Dr. T. C. Fennell, N. Y.

On so-called Spotted Fever.—Dr. J. J. Levick, Pa.

On the Introduction of Disease by Commerce and the Means for its Prevention.—Dr. A. N. Bell, N. Y.

DR. WM. B. ATKINSON, OF PHILADELPHIA, PERMANENT SECRETARY.

Permanent Secretary American Medical Association.—Dr. WILLIAM B. ATKINSON, of Philadelphia.

Assistant Secretary.—Dr. H. R. Storer, Assistant Secretary.

On Patent Rights and Medical Men.—Drs. David Prince, Ill., Thos. Antisell, D.C., and Stephen Smith, N. Y.

The report, after much discussion in relation to the election of the Secretary, was finally adopted.

It was moved that a Committee be appointed to report at the next meeting on the Ligature of the Subclavian Artery. Adopted, and the following gentlemen selected as that Committee:—Drs. Willard Parker, N. Y., Ariusby, Albany, Norris, Philad., and Mussey, Cincinnati, O.

REPORT OF PRIZE COMMITTEE.

The prize was awarded to DR. S. FLEET SPEIR, for an Essay on the Pathology of Jaundice.

The Association then adjourned until four P.M.

THURSDAY, JUNE 9.—AFTERNOON SESSION.

The Association was duly called to order by the President.

The Chairman of Arrangements announced the following members by invitation:—Drs. Barent Staats, Albany State Medical Society; E. M. Hunt, State Medical Society, New Jersey; H. C. Geely, Indiana.

DR. C. C. COX submitted the following resolutions:—

Resolved, That a Committee of three, consisting of Dr. T. L. Smith, of New York, Dr. Wilson Jewell, of Pennsylvania, and Dr. B. F. Bache, U.S.N., be appointed to memorialize Congress upon the subject of the attempted wrong to the Medical Corps of the Navy, as indicated by a widely circulated protest of the line officers of that branch of the service, against the very moderate increase of rank given to medical officers by a General Order of the Department of the 13th March, 1863, which increase in rank by no means corresponds in extent to the advancement in rank of the officers of the line thus protesting.

The following resolutions were also offered and adopted.

By DR. RAPHAEL, N. Y.:

Resolved, To amend the fourth article of the Constitution so as to insert after the word ticket (fifth line) the words, "except in case of the President, who shall be nominated and elected by ballot in open session of the Society, the member receiving a majority of all the votes cast to be declared elected."

DR. DUHAMEL, Washington, D.C.:

Resolved, That the members of the American Medical Association tender their thanks to the gentlemen of the medical profession of the city of New York, for the hospitality and civilities extended to them during their stay here.

Resolved, That we also tender our thanks to Mayor Gunther and the gentlemen of the public institutions, who have extended to the members of the Association much kindness and attention.

DR. MCGUGIN:

Resolved, That the Committee appointed for the purpose of drafting a suitable bill to be presented to Congress for its consideration and adoption on the subject of the relative rank of medical officers of the army and navy, and they are hereby instructed to embrace in its provisions a further separation of the Medical Department from the commanding officers of the line, in order to have a more perfect and unrestrained control of its interests and greater efficiency in that branch of the service.

Also by DR. MCGUGIN:

Resolved, That each member of the Association is hereby earnestly requested to furnish to the Chairman, or any member of the Standing Committees appointed to report upon the subject assigned them, at the next annual meeting, all facts in his possession, and his experience touching the subject matters upon which said Committee are required to report.

DR. PALMER, Mich.:

Resolved, That, as the representatives of the profession of the country, meeting at the moment when the greatest military collision of modern time is at its acme, producing almost unprecedented numbers of wounded and suffering men, calling for the greatest skill and devotion, imposing the deepest responsibilities, the most intense labors, and the most patient and painful endurance on the part of the military surgeons, we cannot separate without a formal and heartfelt recognition of the services of our brethren in the field and hospitals, who have been and are at this moment so nobly responding to all these demands—and while cherishing their immense and invaluable services as an honor to our profession, we commend those men and the memory of their deeds in the cause of sci-

ence and patriotism, of civil government, of Union, of liberty, of humanity, to the gratitude of the country, whose life as well as that of their heroic patients they are laboring to preserve.

THE SUBJECT OF SPECIALTIES.

DR. HOMBERGER, N. Y., offered a resolution for adoption, which had reference to defining the relations which should exist between specialists and general practitioners of medicine, and moved that the Association, in order properly to consider the matter, should resolve itself into a Committee of the whole.

The resolution was favored by Drs. Elsberg and Gardner, N. Y., Storer, of Boston, and others; but was lost, and a motion prevailed to lay it on the table and have a special Committee of five appointed to report at the next meeting.

The usual resolutions of thanks to the President, Secretary, Committee of Arrangements, and others, were passed without comment.

CONCERNING DR. MORTON, THE ALLEGED DISCOVERER OF ETHER.

DR. HENRY D. NOYES, delegate from the New York Eye Infirmary, offered the following resolution:—

Whereas, There is now pending in Congress an appropriation donating to Dr. T. G. Morton, of Boston, the sum of \$200,000, for his services in connexion with the introduction of sulphuric ether as an anæsthetic agent; and

Whereas, The said Dr. Morton, by suits against charitable medical institutions for infringements of an alleged patent covering not only sulphuric ether, but the state of anæsthesia however produced, has placed himself beyond the pale of an honorable profession and of true laborers in the cause of science and humanity;

Resolved, That the American Medical Association enter their protest against any appropriation to the said Dr. Morton, because of his unworthy conduct, also because of his unwarrantable assumption of a patentable right to anæsthesia, and further, because private beneficence in Boston, New York, Philadelphia, and other places, has already sufficiently rewarded him for any claims which he may justly urge.

Resolved, That a copy of these resolutions be sent to the Chairman of the Committee of Ways and Means in the House of Representatives at Washington.

Adopted.

DR. RAPHAEL, of New York, believed that Dr. Morton was generally conceded to be the inventor of anæsthesia, and as such should receive a due amount of credit and emolument. If Congress thought best to vote that amount of money to the Doctor it had a perfect right so to do, and it was no business of the Association to interfere. He hoped that the resolution would not pass.

(Loud calls for question! question!)

DR. MORAN, of R. I., moved the adoption of the resolution, which motion was carried with but two or three dissenting voices.

The reports of the several Sections were on motion adopted.

Some unfinished business of minor importance was then disposed of, after which the Association adjourned to meet in Boston the first Tuesday in June, 1865.

On Thursday evening the members visited the house and laboratory of Dr. Squibb, in Brooklyn, and were elegantly entertained. Notwithstanding the inclemency of the weather a large number were present.

On Friday, those of the delegates who remained in town accepted the invitation of the Commissioners of Charity to visit the different institutions under their charge, and on Saturday the invitation of Dr. McDougal, Medical Director, Department of the East, was accepted to visit the Military Hospitals at David's Island, N. Y.

The Meetings of the Sections.

THE afternoons of Wednesday and Thursday were devoted to the meetings of the different sections of the Association.

SURGICAL SECTION.

WEDNESDAY, 3 P.M.

The section assembled at three P.M., and elected Dr. A.

Van Dyck, of Oswego Co., Chairman, and Julius Homberger, N. Y., Secretary.

Dr. GURDON BUCK, N. Y., exhibited his case of autoplasmic operations of the face, with which our readers are already familiar. Dr. B. stated, at the conclusion of his presentation, that the case had already been presented to the Medical Society of the State of New York, and was to be published in the Transactions of that body for 1864.

On motion, a vote of thanks was tendered to Dr. Buck for the exhibition of his very interesting and instructive case.

TREATMENT OF CONGENITAL CLEFT PALATE BY MECHANICAL APPLIANCES.

Dr. KINGSLEY, N. Y., read a paper on "The Treatment of Congenital Cleft Palate by Mechanical Appliances," in which he assumed the following positions, viz. "1st. The only necessity of operating at all is with a view of improving articulation." "2d. The operation of staphyloplasty in all decided fissures of the velum is without material results in benefiting the speech." "3d. The only treatment now known which can produce this result is the filling of the fissure with an elastic mechanical appliance." This artificial velum is made of vulcanized rubber, and so formed as to restore as nearly as possible the natural shape of the hard and soft palate, reaching the whole length of the opening, terminating near the fauces. It is so flexible that it may be carried in any direction the muscles act upon it, and so elastic as to regain its position as soon as the muscles are relaxed; and to the eye of the physiologist seems to perform as nearly the function of the natural velum as could be expected of any piece of mechanism. The exhibition of the practical application of this velum in the mouths of patients present elicited the admiration of all who witnessed it, and certainly proved that it was all that was claimed for it. The application of this artificial palate renders it possible for a person suffering from this defect to learn to speak well.

The Paper was referred to the Committee on Publication.

Dr. MUSSEY, Ohio, differed with Dr. Kingsley as to the effect which the division of the muscles had upon the speech, and related three cases upon which he had operated by that method with success.

Dr. RAPHAEL, N. Y., had seen a number of cases in which such an operation had been performed, but in none of these had the speech been at all improved.

Dr. BUCK stated that he had operated upon quite a variety of cases of cleft palate, but he had not met with that success which Dr. Kingsley had by the employment of the vulcanite apparatus already alluded to.

Dr. HOMBERGER, N. Y., asked if any of the members had operated upon cases of cleft palate by Langenbeck's method.

Dr. POST, N. Y., remarked that in his cases of staphyloplasty he had endeavored to raise as much of the soft parts from the bone as it was possible to, and supposed that he had raised the periosteum also.

The paper was then referred to the Publishing Committee.

NEW SYRINGE FOR INJECTING THE LACHRYMAL DUCT.

Dr. McFARLAN, N. Y., exhibited a new syringe for the treatment of diseases of the lachrymal duct, and read a description of the instrument. It is composed of a silver canula the thickness of an ordinary probe; the whole is adapted to a small gutta-percha syringe with the capacity of about thirty or forty drops. The tube joins the syringe at a given angle, in order to facilitate its adaptation to the duct into which it is to be introduced. He thought it particularly advantageous in the treatment of that condition of the canal which often remains after a pre-existing stricture has been fully dilated. Under such circumstances there was present a muco-purulent discharge, which was often, by the use of other measures, inclined to be very obstinate and long continued.

Dr. HOMBERGER stated that his experience had taught him that, after the stricture had been fully dilated, the discharge which had before existed, and which was coincident with that condition, disappeared entirely.

Some discussion here followed bearing principally upon the practicability of injecting the sac, and was partaken in by Drs. Homberger, McFarlan, Hutchison, and others.

The section then adjourned until three p.m. on Thursday.

SECTION ON METEOROLOGY, MEDICAL TOPOGRAPHY, EPIDEMIC DISEASES, MEDICAL JURISPRUDENCE AND HYGIENE.

WEDNESDAY, 3 P.M.

The section was organized by the election of S. W. BUTLER, of Pennsylvania, Chairman, and A. N. BELL, of New York, Secretary.

The first business in order was the consideration of Reports of Committees. Dr. Hibbard submitted a report on Compulsory Vaccination, and reported a series of resolutions, which, after being amended, were adopted as follows:—

Resolved, That this Association deems it a duty to institute measures looking to the vaccination, ultimately, of every person within the limits of country over which it exercises jurisdiction.

Resolved, That a Central Committee of five be appointed to enlighten the public mind, by all available means, upon the value and necessity of universal vaccination.

Resolved, That the Central Committee be authorized to appoint Associate and Auxiliary Committees in each State.

The adoption of the Report being in order, after much discussion and some modification, it was voted to refer the Report and Resolutions to the Association for publication in the Transactions.

The Report on Military Hygiene was submitted by Dr. ANDREWS of Illinois, limited, however, in its scope to the Hygiene of Military Hospitals.

On motion, it was voted that the Report be referred back to the Association for publication in the Transactions.

A voluntary communication on the Physiological and Dietetical Properties of Phosphorus was read by Dr. JOHN H. GRISCOM of New York.

After a detailed exposition of the extent and amount in which this substance is found in the various tissues, fluids, secretions, and excretions of the body, there being scarcely one in which it is not a constituent, whereby its importance is properly inferred—the practical application was made of the influence of a deficiency of phosphorus in a variety of diseases of the osseous, nervous, muscular, digestive, and respiratory organs. Scurvy, resulting from too free use of salted food, was shown to be probably due to the loss of the phosphates, which Liebig has proved to be removed by the salt, and is found in the brine. Fresh meat, as well as fresh vegetables, proves to be an antiscorbutic, doubtless in both cases on account of the phosphoric acid. It was further shown that modern modes of preparing food of several kinds deprived it of this element to a large extent, to which many evil results are attributable. Especially is this the case with that "life-preserver of the world"—the wheat grain. By the bolting process, 1400 per cent. of this element is lost. Several specimens of *Farina Cuido*, or roasted wheat, as extensively used in South America, were presented to the Section, and highly commended as substitutes for superfine flour, retaining as they do all the phosphatic matter of the grain. The paper elicited many favorable remarks, and was unanimously recommended to the Association for publication in the Transactions.

Dr. RAMSAY, of New York, submitted a table of sanitary statistics, etc., which, on motion, was referred to the Association with the recommendation that it be referred to the Committee on Publication, with power.

Adjourned till Thursday, 3 p.m.

SECTION OF PRACTICAL MEDICINE AND OBSTETRICS.

WEDNESDAY AFTERNOON.

Prof. B. Fordyce Barker, of N. Y., was elected Chairman, and Dr. Storer, of Boston, Secretary.

THE USE OF THE PESSARY IN PROLAPUS UTERI.

The meeting being organized, and ready for the transaction of business, Dr. GARDNER, of N. Y., read a paper on "The Use of the Pessary in Prolapsus Uteri." He took strong grounds against its use, advocating that it is not only of no avail but absolutely injurious, by inducing irritation to the vagina, etc.

DR. STORER, of Boston, arose and spoke against the argument presented, stating that he had found the pessary of great value in these cases, and cited instances in which it had proved very beneficial.

DR. PEASLEE, of N. Y., also opposed the views of the author, and thought him too general in his statements.

DR. HANCOCK, of N. Y., endorsed the views of Dr. Gardner, and by him a motion was made to refer the paper to the Committee of Publication.

DR. MENDENHALL, of Cincinnati, hoped the Organization would not adopt the views set forth by the author.

DR. GARDNER said it mattered not so much whether his remarks were all true or all not true; he would like them to have publicity, that the profession might be led to give the subject their serious consideration.

DR. TONER thought the Association should publish nothing except what had the sanction of the majority of delegates.

DR. STORER objected to this view of Dr. Toner, and thought the publication of new theories the only sure way to advancement.

A vote was taken on referring it to the Committee of Publication, and carried in the affirmative.

DR. LEVICK was next introduced, and read an article on "Spotted Fever," as regards the propriety of calling it "*Cerebro-Spinal Meningitis*." He very clearly discussed this point, and showed that it is a *general* and not local affection, and that the cerebro-spinal meninges *are not* always affected, but that the *lungs, stomach*, and other organs may be diseased as well. He cited a case of a rugged woman who took it in a well marked form, and died in twelve hours; and on a post-mortem examination, the brain and spinal cord were each found to be in a normal condition, while the lungs and other organs were in a state of ecchymosis. Thinks the term "*cerebro-spinal meningitis*" no more appropriate than to name a *genus* from one of its *species*. The term "*spotted fever*" is characteristic and should be retained, though "*malignant influenza*" would be appropriate. Thought the name important, as it had a bearing on the manner of treating it, which he spoke of in a general manner.

DR. LYMAN, of N. Y., concurred in the remarks just made, and thought the views entertained by the author correct, and moved their acceptance.

DR. FISHER, of N. Y., requested that, as the author has already been over this subject, he be invited to furnish the literature of the same, with his mode of treatment, etc.

DR. HOOKER, of New Haven, was convinced that not only the "members with grey hairs," but the students coming on, would be benefited thereby.

DR. GRANTZ wished to call on Dr. Lyman for the plan of treatment he had spoken of, which was briefly given.

DR. LEVICK rose and said he was thankful to the gentlemen of the "section" for their kind reception of his remarks, and stated that his treatment had been quinine and brandy generally; and was of the opinion (though without experience) that turpentine would be beneficial.

DR. McARTHUR, of Illinois, stated cases in which it appeared plain that the disease was due to *miasmatic* influences, and cited instances of a sugar distillery appearing to give rise to it.

DR. CRITTENDEN, of N. Y., thought no regular course of

treatment could be pursued, owing to the different phases presented, etc.

Vote taken and carried to refer the paper to the Committee of Publication.

DR. STORER next presented an article entitled "The Relation of Female Patients to Hospitals for the Insane; the Necessity, on their Account, of a Board of Consulting Physicians to every Hospital." He gave a clear and interesting account of the manner in which these hospitals are usually conducted, showing that all the responsibility rests on the medical superintendent in charge; and thought these females, inasmuch as their insanity is often due to menstrual derangements, should have the benefit of medical advice. He thought the Butler Hospital a model institution in this respect, and hoped this Association would take measures to correct this present existing and unphilanthropic evil, and closed his remarks by offering a resolution in substance (though not in words) as follows:

Resolved, That for each hospital for the insane females, a competent physician be appointed, whose office shall be honorary, to be consulted respecting such females, etc.

DR. GARDNER heartily endorsed the views of the author, and moved they be accepted and referred to the Committee of Publication.

DR. GRISCOM objected to the part of the resolution offered, making the appointment simply an honorary one, and thought that the physician should be paid for his services if doing public service.

DR. GREEN, of Mass., also favored the honorary appointment, and was followed by different members on each side. After a vote to strike out the clause making it "honorary," which was lost by 21 to 22, it was voted to be accepted by the "Section," to be adopted by the Association, and handed over to the Committee of Publication.

An adjournment was then moved and carried, to meet again at same place to-morrow at 3 o'clock p.m.

THURSDAY AFTERNOON.

The Section was called to order by the Chairman.

DR. SANDS read a paper by DR. H. O. HITCHCOCK, of Kalamazoo, Mich., upon a case of death from entrance of air into the uterine cavities. We hope to be able to furnish our readers with an abstract of the same at some future time. On motion, it was referred to the Committee on Publication. There being other business for transaction, and the time for adjournment having arrived, it was voted to hold another meeting at 8 p.m.

SECTION ON HYGIENE, Etc.

THURSDAY AFTERNOON.

DR. JONATHAN KNEELAND, of N. Y., presented a voluntary report on some of the causes promoting the extinction of the Aborigines of America. This paper points out graphically the manifold evils which are surely moving onward towards their certain doom, the Onondagas, one of the six nations of American Indians. The power of syphilis, scrofula, and the vices of civilization, engrafted upon the improvidence of barbarism, are set forth, and the physical peculiarities of this strange people are ingeniously pointed out.

The report was, on motion, referred to the Association, with the recommendation that it be sent to the Committee of Publication for publication in its Transactions.

DR. THOMPSON, of Ohio, Chairman of the Committee on Milk Sickness, presented a report, which, on motion, was also referred to the Association for publication.

DR. CHARLES W. PARSONS, of Rhode Island, presented a Special Report on the Medical Topography and Epidemic Diseases of Rhode Island, which, on motion, was referred for publication. On motion, the section adjourned.

SECTION ON MATERIA MEDICA

THURSDAY AFTERNOON.

At the meeting of the Section of Chemistry and Materia Medica, held at 3 p.m. Thursday, Dr. Griscom, of N. Y., was elected Chairman, and Dr. Jas. Hart Curry, of Westchester Co., Secretary.

DR. MCGOWAN, of Washington, D.C., presented, through Dr. Griscom, a communication upon "The Introduction and Cultivation of the Cinchona Plant into the Island of Hayti."

Referred to Committee of Publication.

DR. E. R. SQUIBB presented his paper from the Committee upon the Practical Working of the U. S. Law, "To prevent the Importation of Adulterated and Spurious Drugs and Medicines."

The paper was discussed by Drs. Percy, Squibb, Mussey, Brown, of Providence, and Hutchinson, N. Y.

DR. HUTCHINSON moved to refer to the Association with a recommendation that it be published.

On motion, an amendment was proposed of striking out certain parts of the report in conclusion relating to personalities, which was lost, and the original resolution carried.

The Section then adjourned.

Reports of Hospitals.

U.S. GENERAL HOSPITAL, CHRISTIAN STREET,
PHILADELPHIA.

REPORT ON REFLEX PARALYSIS,

BY S. WEIR MITCHELL, M.D.; GEO. R. MORRHOUSE, M.D.; AND WM.
W. KEEN, JR., M.D.

(Continued from page 261.)

THE patient, it should be noted, was not injured by his fall, and, as we have seen, showed no signs of concussion. He, as well as his medical attendant, attributed the phenomena which he exhibited to the shock given to the auditory nerve. This opinion has since been confirmed by the cases reported by M. Brown-Séguard and others. Further on we shall show that in rare cases gunshot wounds cause partial or very general paralysis of grave type and prolonged duration in parts not directly injured; we shall also show that these protracted paralyses must be due to an equally permanent affection of the nerve centres. Now, if this be possible, there is every reason to believe that a temporary, though general, paralysis may take place in a large number of gunshot wounds. When the cardiac centres feel the shock most severely, the feebleness will of course be greater; but there is much reason to suppose that the cerebral and spinal centres in general suffer *en masse* in every case of loss of consciousness from shock. As we proceed, we shall have occasion to discuss the mechanism of the more permanent forms of reflex paralysis. Here we desire only to show that the effect of grave wounds is to cause a condition of the centres which gives rise to a general and profound feebleness, and that in rare cases the central effect is so intense as in some way to cause paralysis, which may last for hours, days, or months. Another class of nerve affections demands some notice before we discuss the undoubted instances of reflex paralysis from wounds which have fallen under our notice. These are what the French writers call cases of injury from commotion. They differ from those we have described in being due to the mere mechanical effect produced upon the neighboring parts. If, for example, a ball passes near the spinal column, it is conceivable that the roll of its motion and the resistance of the tissues, may determine in the spine a brusque and sudden oscillation of the contents, sufficient to cause very grave results. We have sometimes seen this illustrated in a very interesting shape, and in a less dangerous form. Thus, in the case of a soldier who was shot at Gettysburg, July 3, 1863, the ball entered the cheek, and passing outside of the ramus of the jaw, was cut out of the trapezius muscle. It struck the ramus, but did not fracture it, or interfere with the act of mastication. In October, one or two very minute morsels of bone escaped from the neck, in front of, and four inches below, the jaw. The only injury to the jaw-bone must have been on

its exterior surface, from which the pieces of bone alluded to worked down the tissues of the neck. The shock caused complete paralysis of the inferior dental nerve, with absolute anæsthesia, analgesia, and loss of sense of temperature in the lower lip and chin of the injured side. The sensation was for the most part rapidly restored by the use of cutaneous faradization, after the nerve had been allowed time to recover from the results of the shock it had sustained. A portion of the lip, the skin below it, and the mucous membrane within, still remain rebellious to treatment.

The other case of mechanical shock to a nervous structure we shall report at length. It is one as to which there may reasonably exist some doubt, whether to call it an instance of commotion of the spinal cord, from injury of neighboring parts, or to regard it as an impression made upon the spinal centre through the injured nerves, and resulting in a paralysis, as the reflected result of the state into which the centres were thus thrown. It is impossible to be sure that both sets of causes may not have been at work.

(To be continued.)

BELLEVUE HOSPITAL.

FRACTURE OF THE LEG.

(Continued from page 271.)

DR. H. RAPHAEL, late House Surgeon of this hospital, has published in the AMERICAN MEDICAL TIMES, Aug. 15th, 1863, a modification of Pott's splint, made by himself, so that after its application to the leg, extension may be made by an endless screw. The Doctor published four cases in connexion, which had been treated upon the splint thus modified, and of these he says: "These cases have been examined by some of our most distinguished surgeons, who expressed their entire satisfaction with the results thus obtained." The modification certainly renders Pott's splint a better surgical appliance, and it would be rendered more efficient still had there been two nuts instead of one, about three inches apart upon each piece, which would correct the tendency of the splint to bend upon itself.

The side or profile splint made of wood, and which is employed by nearly every surgeon in the land, cannot be compared in efficiency to the leather splint; for no matter how full be the set with which the surgeon has supplied his office, he will often find it difficult to get one which will fit the leg, besides being more difficult of retention than the leather for the same reason. In fine, the leather will do all that can be claimed for the wooden splint, and do it too with much more convenience and accuracy.

Soon after the publication by Dr. JOHN SWINBURNE of his paper on the "Treatment of Fractures of Long Bones by Simple Extension," his splint for fractures of the leg was put in use in this hospital, and was pretty extensively employed up to within a few months of the present time, since which it has gradually fallen into disuse. Dr. Swinburne says:—"I feel that the profession is not fully aware of the many bad results of oblique, compound, and comminuted fractures of the leg; as for myself, astonished at finding so many (when my attention was called to the fact), I was led to investigate the cause. Since this time I have not lost sight of the subject, and have treated all my cases of oblique and compound fractures of the tibia and fibula, and in fine all those where any displacement is anticipated, by extension and counter-extension." Precisely what class of cases is meant by "those where any displacement is anticipated" we will not pretend to decide, unless it be those cases in which it is difficult to keep the bones in perfect apposition, by means of simple splints of coaptation. The practice of the hospital with Dr. Swinburne's splint was to apply it to nearly all cases of fracture of the tibia and fibula, simple, compound, and complicated, with or without displacement, making more or less extension as the nature of the case suggested—for the description of the splint and the method of application the reader is referred to the original paper; and the result of this prac-

tice is contained in the following criticism:—For fractures of either the tibia or fibula separately, or of both together, without displacement, the splint is not so available as splints of coaptation, which are all that is required in these cases, and have the advantage over Swinburne's apparatus of allowing the patient to leave the bed; but it is fair to state that this class of fractures is not included among those for which the author recommends his apparatus. In oblique and compound fractures, where the fragments override and extension is indicated, Dr. Swinburne's splint is correct in theory, but in practice gives us no better results, with greater inconvenience than other dressings; and, after its application in many of these cases, it has been cast aside for other and more efficient apparatus. We cannot secure the foot so as to make any considerable amount of permanent extension without raising the heel, so that all the stress of the adhesive plaster comes upon the instep, and in this way the extension is either nullified or directly productive of discomfort to the patient, and in some cases, as fractures at or near the malleoli, of absolute deformity. If it be attempted to secure the heel by strips of plaster, ulceration is the consequence; besides, we do not think of using the splint without the assistance of sand-bags, which act as splints and assist very materially in preserving the shape of the limb. The conclusion then, is, that Swinburne's apparatus will often accomplish good results, but not so efficiently and with more inconvenience than the leather splints. In Pott's fracture, with luxation of the foot, we have obtained the most perfect results with the leather; so much so, that Dupuytren's splint is not used at all in many of the wards. The following cases may serve to illustrate its effects:—

F. Q., æt. 40, admitted Jan. 22d, 1864. While walking on the pavement his foot slipped and turned inwards (he thinks), and immediately he was unable to walk; was brought to the hospital with the foot and ankle much swollen, and a fracture of the fibula was found about three inches above its lower extremity; the foot was placed between sand bags, and cold water dressings applied. In a few days the tumefaction entirely subsided, when it was found that a piece was chopped off from the inner malleolus. At this time the whole foot was dislocated backwards by the action of the posterior muscles, and looked as though union, with a considerable deformity, must be the inevitable result. Two leather splints were moulded and bandaged to the foot, which was then forcibly extended and flexed upon the leg, while the side-pieces were secured to the leg. Feb. 14th the dressings were removed, and the ankle looked natural. Splints reapplied. March 1st.—Dressings again removed, and not the least deformity can be discovered. March 6th.—Patient is walking about, and a medical gentleman could not tell which ankle had been broken.

CASE 2.—M. H., æt. 12, admitted Feb. 13th, had the fibula fractured $1\frac{1}{2}$ inches above its lower extremity by direct violence. The foot was displaced outwards at an angle of about 45° , and the integument over the inner malleolus was tense and ecchymotic; the foot was reduced, and leather splints applied. March 1st.—Dressings removed, and the ankle in excellent shape. March 18th.—The union is firm, and no deformity discoverable. Both of these patients were allowed to get up and go about on crutches, and in neither could the least deformity be recognised.

The plaster-of-Paris splints now employed in the New York Hospital for fractures of the leg, nearly to the exclusion of all others, have been used occasionally in this hospital since the publication, by Dr. James L. Little, of his valuable article upon "The Treatment of Fractures by Plaster-of-Paris Splints." Dr. Little, then Resident Surgeon of the New York Hospital, read the letters of Drs. Smith and Swan, from Paris, stating that Maisonneuve had revived and modified the use of this material for the treatment of fractures. The Dr. next employed the plaster-of-Paris as splints in the New York Hospital, and for the success at-

tending its use the reader is referred to his paper, which may be found in the AMERICAN MED. TIMES, Dec. 7th, 1861. This material makes an excellent dressing for nearly every fracture of the leg, and, like the leather, does not confine the patient to his bed. Inasmuch as it may not be convenient for all to refer to Dr. Little's paper, we will simply describe the method of its use which obtains at present in the New York Hospital:—A piece of Canton flannel, which, when doubled, shall be wide enough to encircle the leg for rather more than half its circumference, and of sufficient length to extend from just below the knee to about five inches below the heel, is first wrung out of water, and then saturated in a mixture of equal parts of finely ground plaster-of-Paris and water; next smoothe out the Canton flannel thus saturated, and spread it upon an even surface beneath the fractured leg; now getting the leg in position, the flannel is smoothly and expeditiously applied to the leg upon each side; the portion extending below the heel is next brought up against the sole of the foot, and the sides over the dorsum of the foot; the dressing is completed by passing a roller from the toes to the knee; the plaster sets in a few minutes, and after it has thoroughly solidified, the roller may be removed, and strips of adhesive plaster passed around the limb, which leaves the anterior portion of the leg exposed to view. As has already been stated, this dressing is applicable to nearly all cases of fracture of the tibia and fibula, except to those cases of Pott's fracture with luxation of the foot, in which the displacement is not easily reduced and retained—just the class of cases in which the leather splints exhibit some of their best effects.

The reason why the plaster is not used more extensively in this hospital is, because all that can be done by it can be accomplished by the leather, which is cleaner, can be adapted with more leisure, and is applicable to a larger class of cases.

American Medical Times.

SATURDAY, JUNE 11, 1864.

THE LATE MEETING OF THE ASSOCIATION.

THE AMERICAN MEDICAL ASSOCIATION has closed its FIFTEENTH annual session and dispersed. As we had anticipated, the meeting was a decided success. The attendance equalled that of the best days of the Association in ante-rebellious times. Delegates were present from every section of the loyal States, and from the army and navy. The utmost good feeling prevailed throughout the session, and every member seemed to regard this great national reunion as an occasion of especial personal enjoyment.

A perusal of the proceedings, which we present as completely as our columns will admit, will give some idea of the labors of the Association and the character of the questions submitted to its consideration. Every subject was fully, we might say superabundantly discussed, and in the main the decisions were made with decided majorities, and were gracefully acquiesced in by the minorities.

The choice of President fell upon PROFESSOR DAVIS, of Chicago, with marked unanimity. As one of the projectors of the Association, and as an ardent and earnest laborer in the promotion of its interests, he is entitled to whatever honors it can confer. To no other member is the ASSOCIATION more indebted for the perfection of its organization, and for the high and influential position which it has attained. Worthily, however, as PROF. DAVIS fills the office of President, we should have preferred to see

this highest position in the gift of the profession conferred upon one whose name to-day confessedly outranks all living medical men, but whom, in the natural order of things, we cannot much longer honor. The Association has heretofore acted wisely in selecting a President from among its eminent senior members, and it is a pleasant reflection that the names of CHAPMAN, WARREN, IVES, etc., are enrolled on this honorable record. Younger members can afford to waive these distinctions for the present, in favor of those whom the universal profession desires to honor, but who are soon to pass from the stage of action.

The Permanent Secretaryship was established by a unanimous vote, and DR. WM. B. ATKINSON, of Philadelphia, was selected to fill the position. The office is a most important one, and, if its duties are efficiently discharged, will have a marked influence upon the future success of the Association. No large and extended organization can be efficiently managed without the ceaseless activity of a capable business officer, who shall constantly and intelligently supervise the details of its affairs. In the selection of its first Permanent Secretary the Association has, we believe, acted with signal discretion. DR. ATKINSON has had large experience as secretary of various medical organizations, is Permanent Secretary of the Pennsylvania State Medical Society, and has always proved untiring in the discharge of the laborious, tiresome, but responsible duties of that office. Under his management the affairs of the Association will, we believe, assume a more business-like aspect, and its general interests will be greatly increased.

The voluntary papers and the reports were, on the whole, creditable to their authors. There was not, however, that maturity of thought and expression which result from careful investigations and long continued study. This is principally due to the haste with which papers and reports were prepared, and will be obviated in part by the more regular and systematic meetings of the Association. A number of prize papers were presented, and it is highly creditable to the literary and scientific ability of DR. SPEIR that he carried off the prize in the face of the powerful competition.

Among the distinguished members of the profession present we noticed DR. BROWN-SEQUARD, of London; DR. USHER PARSONS, of R. I.; DR. THOMAS COCK, N. Y.; DR. H. H. CHILDS, of Mass.; DR. C. S. TRIPLER, U.S.A.; DR. J. KNIGHT, Conn.; DR. R. LA ROCHE, of Phila.; DR. C. A. LEE, of N. Y.

INSANE COLONIES IN FRANCE.

THE French Government has finally determined to adopt the system of free-air treatment of the insane, as carried out at Gheel, and so eloquently advocated by DR. PARIGOT of this city. The Council-General of the Rhone, according to the *Med. Times and Gazette*, has recently voted the funds necessary for placing in families one hundred indigent insane persons whose mental condition does not necessitate their sequestration in an asylum. The indigent insane recognised as incurable and inoffensive in the Antiquaille Asylum, are placed out on recommendation of the chief physician. "Without doubt," observes M. GARNIER, in the *Union Médicale*, "this example will become promptly contagious; and this will be much to be commended, providing that there be constituted a medical and administrative inspection of these patients, as in the case of foundlings. Unable

to restore their moral health to these poor creatures, we can at least provide for their physical well-being, by this family regimen, life in the open air and varied labors, which are more likely to conduce to it than the residence in an asylum. For the safety of the families concerned and the success of the experiment, care must be taken that the persons selected are both incurable and harmless."

TETANUS IN THE ARMY.

TETANUS has prevailed among the wounded of the Army of the Potomac to an unusual extent. Upwards of fifty cases occurred within a short period at Fredericksburg and in the hospitals at Washington. Nearly every case proved rapidly fatal. We are glad to learn that DR. BROWN-SEQUARD, of London, now in this country, has consented to give a lecture on this disease, at Washington, where it is now most prevalent. The great experience of this eminent physiologist in the treatment of nervous affections will thus be made available to the army surgeons in the management of this obscure and fatal complication of gunshot wounds. This lecture will be immediately published for circulation in the army.

ADVANCE IN THE SUBSCRIPTION PRICE.

By an announcement in another column of this number it will be seen that the Publishers have advanced the subscription price of this Journal to Five Dollars per annum. This is due to the extraordinary rise in the prices of paper, printing, etc., which have added more than fifty per cent. to the cost of the work. At the former rates this Journal was the cheapest medical journal published, furnishing from three to eight times as much printed matter as other journals of the same subscription price. To continue its publication at the former rate, with the present advanced prices in all kinds of printing material, would in effect reduce its subscription to mere gratuity. The advance now made simply places the MEDICAL TIMES upon nearly the same basis on which it was first established.

Reviews.

RECORDS OF THE ELEVENTH ANNUAL MEETING OF THE MAINE MEDICAL ASSOCIATION, CONVENED IN PORTLAND, JUNE 10, 1863.

THE Annual Address, by DR. J. T. Dana, is principally devoted to the discussion of "*Medical Esprit du Corps*," a full development of which begets appreciation of the objects of the Association, fraternal interest of its members, and the recognition of certain obligations. The only scientific paper is a *Report upon Pharmacy*, by DR. H. T. Cumming, embracing some of the recent improvements in pharmacy.

THE NERVOUS AND VASCULAR CONNEXION BETWEEN THE MOTHER AND FÆTUS IN UTERO. By JOHN O'REILLY, M.D., F.R.C.S.I.

WITH his characteristic originality and ingenuity, DR. O'Reilly labors to prove that there is a nervous connexion by which impressions are conveyed from the mother to the fetus in utero, a doctrine hitherto ignored by a large portion of the medical profession. Many curious facts are given for the support of his theory, and cases recited of various deformities in the child, following some supposed impression conveyed from the mother while pregnant. If we are always to regard a *post hoc* as a *propter hoc*, we must accept these cases as genuine illustrations of an established fact; otherwise we may call them remarkable coincidences. We

fancy there are few women who pass through their entire term of gestation without being at some time startled, either by strange sights or sounds; and should the impression thus produced be conveyed to the fetus, we fear the world would be filled with a race of monsters. Yet, however sceptical we may be on this point, we have been deeply interested in the perusal of the book, and commend it to the consideration of our readers.

Correspondence.

CANCER OF THE STOMACH.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR—ABOUT three months ago a female patient in this institution, aged 75 years, began to complain that, after eating two or three mouthfuls of food, she became so nauseated as not to be able to swallow any more. This extreme nausea was the only symptom of which she then complained. There was very little tenderness on pressure over the stomach; no tumor could be felt in this region nor at any time during the history of the case, though frequent and thorough examinations were made. There was no vomiting, unless persevering efforts were made to force down food after the stomach had revolted against it; and then every particle which had been taken seemed to be ejected. Pain was not complained of until two or three weeks before the patient died, and it continued more or less severe till that event took place. The complexion was that peculiar to cancerous cachexia. The patient lingered until April 30th, when she died, very much emaciated. On post-mortem examination, forty-eight hours afterwards, the posterior wall of the left extremity of the stomach was found to be the seat of cancer. The deposit was confined principally to that portion of the organ which lies in contact with the spleen. The coats were perforated in several places; one of the perforations was as large as a silver quarter. There was very little thickening of the part, which accounts for our inability to detect a tumor during life. There was no obstruction of the passage between the œsophagus and the stomach, nor was the pyloric opening involved.

Perhaps it may be interesting to give a brief history of another case of the same disease which occurred in our hospital, as it contrasts very strikingly in many particulars with the preceding one:—

John Kerrigan, an Irish laborer, aged 56 years, came to us on the 23d of October last, complaining of great soreness over the stomach, frequent regurgitations of portions of the contents of that organ, in a very sour state, and an inability to take solid food in consequence of the severe pain which it excited. The patient was very feeble and much emaciated, and had the complexion so characteristic of the cancerous diathesis. On examination of the abdomen there seemed to be some fulness over the stomach, and dulness on percussion, with much tenderness, which prevented the exploration being thorough and satisfactory. In the course of three or four weeks after his admission an undue prominence began to be very apparent over the left extremity of the stomach, which continued to increase until his death, when a large tumor was well defined by the elevation of the walls of the abdomen. There was no vomiting until twelve or fourteen days before the termination of the case, and it at once became a prominent symptom, continuing more or less copiously until that event.

The patient died on the 23d Dec., and the autopsy affirmed the diagnosis which was made in the early history of the case, namely, cancer of the stomach. The deposit was confined principally to the large arch of the organ, and formed a considerable tumor. There were no perforations, but there were some deep ulcers, one of which had so nearly perforated the wall, it was a matter of surprise that the remaining fibres of peritoneal coat should not have

given way in some of the efforts of vomiting. The orifices of the stomach were not at all involved; there were, however, cancerous deposits in other parts of the alimentary canal.

MARSHALL INFIRMARY, TROY, N. Y.,
May 24th, 1864.

VARIOLA UPON ONE HALF OF THE BODY.

(To the Editor of the AMERICAN MEDICAL TIMES.)

SIR—Your correspondent, Dr. RAYMOND, of Michigan, propounds some queries in regard to his case of one-sided variolous eruption which I propose briefly to answer.

He asks:—Did the vaccination, thirty-six years ago, only affect or protect the right side?

I answer—Such a supposition is contrary to all theory and known facts in the history of vaccination.

Secondly—Would he have escaped had the child slept on the right side of him?

Ans.—No.

Thirdly—Why should the eruption have been confined to the side on which he was not vaccinated?

Ans.—Because the child slept on that side.

Fourthly—Is it essential to vaccinate in both arms in order to be wholly protected from the contagion of small-pox?

Ans.—No. Yet other things being equal, the greater the number of insertions of the vaccine virus the greater the immunity from small-pox contagion and serious results. This fact is proved by recent statistics compiled from a large number of cases.

There is a case at this time in the pest-house connected with the U.S.A. General Hospital in this city, which, in my opinion, explains all the phenomena in the above case. One of the nurses has some pustules upon his fingers and face, but has no constitutional symptoms whatever. They are the local effects merely of the virus upon the skin. Being an experienced nurse in small-pox hospitals, he regards the eruptions as of common occurrence, and has experienced them frequently in his person.

D. W. FLORA,
A. A. Surg. U.S.A.

MADISON, IND., May 1st, 1864.

Army and Navy.

CIRCULAR LETTER.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., June 1, 1864.

General Orders No. 191, of May 7th, 1864, declare all Prisoners of War of the Federal Army, on parole at that date, exchanged; and at the request of the Commissary-General of Prisoners, Surgeons-in-charge are directed to take up on the same rolls as other soldiers, all Paroled Prisoners who were in any of the United States General Hospitals at the date of the General Order, and report them to Colonel Hoffman, Commissary General of Prisoners of War, as so transferred.

By order of the Acting Surgeon-General:

C. H. CRANE,
Surgeon, U.S.A.

CIRCULAR LETTER.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., June 4, 1864.

The following Circular from the War Department is respectfully furnished for your information and guidance.

WAR DEPARTMENT, ADJUTANT-GENERAL'S OFFICE,
WASHINGTON, May 25, 1864.

CIRCULAR No. 41.—1. The Secretary of War directs, that in cases where officers and enlisted men (such as exchanged prisoners, convalescents, etc.), are to be sent to their regiments in the field, they shall not be forwarded, unless it is probable that they will reach their regiments in time to serve at least ten days before the expiration of their term of service.

2. The attention of all commanders is invited to the orders from this Office, directing that the men whose term of service expire at the expiration of the original term of the regiment, should be sent to the State to which the regiment belongs, to be mustered out under the Superintendence of the Chief Mustering Officer of the State. When

the term of service of enlisted men expires at other times, they should be mustered out of service by the Commissary or Assistant Commissary of Musters of the command in which they may be serving. When enlisted men are too sick to travel to the proper place of muster-out, they will be discharged for disability, in the usual way, stating in addition the fact that the soldier's term of service has expired. The discharge of men of the Veteran Reserve Corps is provided for by Circular No. 12, current series, from this Office.

E. D. TOWNSEND,
Assistant Adjutant-General.

By order of the Acting Surgeon-General:

C. H. CRANE,
Surgeon, U.S.A.

ORDERS, CHANGES, &c.

ASSIGNMENTS.

Assistant-Surgeon G. M. Stenberg, U.S.A., as Surgeon-in-charge, General Hospital, Cleveland, Ohio.
Surgeon J. J. Delamater, U.S.V., as Surgeon-in-Chief, General Shipley's command, Norfolk, Va.
Surgeon M. Goldsmith, U.S.V., to the Red River Expedition (temporarily).
Surgeon Samuel Hart, U.S.V., as Surgeon-in-charge, General Hospital, Tullahoma, Tenn.
Surgeon W. A. Conover, U.S.V., as Medical Inspector, 18th Army Corps.
Acting Assistant-Surgeon W. H. Curran, U.S.A., to Camp Hospital, Louisville, Ky.
Assistant-Surgeon B. McCluer, U.S.V., to General Hospital, Madison, Ind.
Surgeon G. R. Weeks, U.S.V., as Medical Inspector, Department of Arkansas.
Surgeon J. J. Craven, U.S.V., as Medical Director, 18th Army Corps, Department of Virginia and North Carolina.
Surgeon Henry Eversman, U.S.V., as Chief Medical Officer at Johnson's Island, Ohio.
Surgeon W. D. Stewart, U.S.V., as Surgeon-in-Chief, Reserve Division, Department of West Virginia.
Surgeon T. B. Reed, U.S.V., as Assistant Medical Director in the field, Department of West Virginia.
Assistant-Surgeon W. T. Okie, U.S.A., as Surgeon-in-charge, General Hospital (Joe Holt), Jeffersonville, Ind.
Acting Assistant-Surgeon W. H. Curran, U.S.A., to Camp Hospital, Louisville, Ky.
Hospital Chaplain W. M. Grimes, to Totten Hospital, Louisville, Ky.
Assistant-Surgeon J. Y. Cantwell, U.S.V., to charge of the Hospital Transport "Ashland."
Surgeon C. C. Duncreecher, U.S.V., to Fort Dallas, Oregon, to accompany Indian Expedition.
Surgeon A. L. Cox, U.S.V., as Surgeon-in-Chief, 1st Division, 20th Corps, Army of the Cumberland.
Assistant-Surgeon S. B. Ward, U.S.V., to 3d Division, General Hospital, Alexandria, Va.
Surgeon W. I. Wolfley, U.S.V., as Surgeon-in-Chief, De Russey's Division, Arlington, Va.
Surgeon A. H. Thurston, U.S.V., as Medical Inspector of Hospitals, Department of Washington.
Surgeon F. H. Gross, U.S.V., as Medical Director of Hospitals, Annapolis, Md.
Surgeon R. A. Christian, U.S.V., to Philadelphia, Pa.
Surgeon C. F. H. Campbell, U.S.V., as Medical Inspector of Hospitals, Middle Department.
Surgeon A. J. Phelps, U.S.V., to special duty with the Medical Director, Army of the Potomac.
Hospital Steward G. Palazzotto, 4th New York Cavalry, to the General Hospital, Annapolis, Md.
Acting Assistant-Surgeon Edward David has been relieved from duty at Elmira, N. Y., and assigned to duty Fairfax Seminary Hospital, Va.

ORDERS.

Assistant-Surgeons E. M. Powers and J. H. Ledlie, U.S.V., to report to the Commanding General, Department of Missouri.
Assistant-Surgeons Benj. Dnrham, A. McMahon, and J. B. Petherbridge, U.S.V., to report to the Commanding General, Department of the Gulf.
Surgeon George W. Hogeboom, U.S.V., is relieved from duty in the Department of Missouri, and will report to the Commanding General, Department of Kansas.
Assistant-Surgeons E. A. Clark, M. B. Cochran, and H. W. Davis, U.S.V., will report to the Commanding General, Department of Arkansas.
Assistant-Surgeons D. R. Brower and Geo. Derhy, U.S.V., will report to the Commanding General, Department of Virginia and North Carolina.
Assistant-Surgeon Thomas R. Pooley, U.S.V., will report to the Commanding General, Army of the Potomac.
Assistant-Surgeon M. F. Cogswell, U.S.V., will report to the Commanding General, Department of the East, for assignment to duty at Albany, N. Y.
Surgeon R. H. Gilbert, U.S.V., now on sick leave, will report in person to Assistant Surgeon-General R. C. Wood, U.S.A., Louisville, Ky., for assignment to such duty as his health will permit, as soon as able to travel.
Surgeons C. S. Tripler and H. R. Wirtz, U.S.A., and Surgeons Thos. Antisell and C. C. Cox, U.S.V., are detailed to represent the Medical Department of the U. S. Army, at the meeting of the American Medical Association in New York city, June 7, 1864.
Assistant-Surgeon Brinton Stone, U.S.V., will report to the Surgeon-General, U.S.A., for duty in his office.
Surgeon Whitehill on being relieved will report to the Commanding General, Northern Department.
Surgeon D. B. Sturgeon, U.S.V., now on leave of absence, will at once rejoin his proper station in the Department of New Mexico.

A Board to consist of Surgeon E. H. Abadie, U.S.A., Surgeon Jonathan Letterman, U.S.A., and Assistant-Surgeon E. S. Dunster, U.S.A., will assemble at West Point, N. Y., to examine into the physical qualifications of the members of the Graduating Class. The same Board will continue in session until they have examined into the physical condition of all newly appointed Cadets, and will report their proceedings to the War Department.

The following Officers unconditionally released by the rebel authorities, will proceed without delay to rejoin their respective commands:—
Surgeon N. F. Graham, 12th Ohio Vols., Assistant-Surgeon W. S. Newton, 91st Ohio Vols., Surgeon N. D. Fuguson, 6th New York Cavalry, Assistant-Surgeon D. W. Richards, 145th Pennsylvania Vols., Surgeon W. S. Welsh, 15th West Virginia Vols., Assistant-Surgeon J. J. Johnson, same regiment, Surgeon C. H. Thatcher, 14th West Virginia Vols., and Chaplain John L. Irwin, same regiment.

LEAVE OF ABSENCE.

Surgeon J. B. G. Baxter, U.S.V. (20) twenty days leave from Department of the Gulf, with permission to apply for forty days' extension.

Surgeon N. K. Derby, U.S.V., for sixty days on Surgeon's certificate of disability.

Surgeon A. P. Dalrymple, U.S.V., for twenty days.

RESIGNATIONS.

Surgeons W. C. Otterson, U.S.V., to take effect May 26, 1864.

Surgeon Bernard Beust, U.S.V., to take effect May 26, 1864.

Chaplain Joseph Fialon, U.S.A., to take effect May 5, 1864.

DISCHARGES, DISMISSALS, ETC.

Medical Cadet J. W. Magruder, U.S.A., honorably discharged to enable him to accept an appointment as Acting Assistant-Surgeon U.S.A.

Hospital Steward J. F. Evans, U.S.A., dishonorably discharged for drunkenness.

Assistant-Surgeon Frederick W. Simpson, 72d New York Vols., having failed to appear before a Military Commission as ordered, is dismissed May 9, 1864, for absence without leave.

Assistant-Surgeon C. Teal, 25th Iowa Vols., having been examined by a Military Board, and an adverse report made in his case, is discharged the service.

Assistant-Surgeons W. I. Wolfley, 63d, and H. Z. Gill, 95th Ohio Vols., honorably discharged on tender of resignation, to accept new appointments.

PROMOTIONS.

Assistant-Surgeons J. Y. Cantwell, Wm. I. Wolfley, H. E. Goodman, and H. L. W. Burritt, U.S.V., to be Surgeons of Volunteers.

APPOINTMENTS.

Assistant-Surgeon David McKay, 79th New York Vols., to be Surgeon 29th U. S. Colored Troops.

Dr. L. C. Chapin, of Connecticut, to be Surgeon 28th U. S. Colored Troops.

NAVY.

Regular Navy Orders.

Surgeon John Thornley detached from the Naval Rendezvous, New York, and awaiting orders.

Surgeon Robert Woodworth ordered to the Naval Rendezvous, New York.

Surgeon William E. Taylor detached from the Carora and waiting orders.

Assistant-Surgeon Wm. H. Jones ordered to the Practice Steamer Marblehead.

Assistant-Surgeon W. S. Oherly detached from the Naval Academy and ordered to the Practice Ship Macedonian.

Assistant-Surgeon Adolph A. Hochling detached from the Roanoke and waiting orders.

Assistant-Surgeon George W. Woods ordered to the Roanoke.

Assistant-Surgeon G. H. E. Baumgarten ordered to the Naval Hospital, Memphis, Tenn.

Surgeon H. F. McSherry detached from the Naval Hospital, Memphis Tenn., and waiting orders.

Surgeon F. M. Potter detached from the Receiving Ship Ohio, and ordered to the Niagara at New York.

Surgeon Edward F. Corson ordered to the Receiving Ship Ohio.

Assistant-Surgeon Edward S. Matthews to report at Philadelphia, Pa., for examination for promotion.

Assistant-Surgeon Samuel W. Abbott, U. S. S. Niagara, resignation accepted.

Assistant-Surgeon Josiah H. Gunning ordered to the Naval Hospital, New York, for duty.

Assistant-Surgeon E. S. Bogert detached from the Naval Hospital, New York, and ordered to the U. S. S. Niagara.

Volunteer Naval List.

Wm. J. Simon appointed Acting Assistant-Surgeon, and ordered to the Princeton, at Philadelphia, Pa.

Charles S. Green appointed an Acting Assistant-Surgeon, and waiting orders.

Isalah Dewling appointed Acting Assistant-Surgeon, and ordered to the South Atlantic Blockading Squadron.

Edward W. Avery appointed Acting Assistant-Surgeon, and ordered to the Banshee, at New York.

Acting Assistant-Surgeon Henry Shaw, of the Ethan Allen, resignation accepted, to take effect on the reporting of Acting Assistant-Surgeon Dewling.

Acting Assistant-Surgeon D. J. Harris detached from the North Carolina, at New York, and ordered to the South Atlantic Blockading Squadron.

Acting Assistant-Surgeon W. W. Howard ordered to the South Atlantic Blockading Squadron.

Acting Assistant-Surgeon Wm. Nick detached from the South Atlantic Blockading Squadron, and ordered North.

Acting Assistant-Surgeon John W. Hamilton detached from the Catskill and waiting orders.

Acting Assistant-Surgeon Benjamin Marshall ordered to the South Atlantic Blockading Squadron.

Original Lectures.

SPERMATORRHOEA,

BEING A

LECTURE DELIVERED AT THE COLLEGE OF
PHYSICIANS AND SURGEONS

DURING THE SESSION OF 1863-4,

By WILLARD PARKER, M.D.,

PROFESSOR OF THE PRINCIPLES AND PRACTICE OF SURGERY AND SURGICAL
PATHOLOGY.

(Concluded from page 266.)

We come now, gentlemen, to speak of the treatment of this unfortunate malady, and we shall consider it first in a general point of view. The object of all treatment should be to invigorate and strengthen the whole system, and this can be accomplished only by an entire change in the habits of the individual. The patient must be made to live out-doors, to occupy himself in vigorous muscular exertion, such as he would have in becoming a civil engineer, or as he would have by going to sea and serving before the mast, or as he would have by long tramps on horseback, or by adopting a soldier's life and roughing it. He should also have cold ablutions of his whole body, which should be taken once or twice in the 24 hours, together with cold douches over the lumbar region, followed by active friction. Cold bathing of the genitalia is also very good at night, as is also the injection of half a pint of cold water into the rectum to act as a local tonic. He should sleep in a large, well ventilated, and cold room, on a hard bed, with plenty of cover on the feet and but little about the central portion of the body. The food must be nutritious and easy of digestion, such as milk and bread, fresh fruit, and meat in moderation. Aliment, too, should be taken at fixed intervals, in order to give the stomach a good chance to rest after it has got through with digestion. Late suppers must be avoided by all means, and the bowels must always be kept in a soluble condition. Patients who suffer from seminal weakness must be careful to empty the bladder on retiring; and if they wake during the night and have erection, associated with fullness of the bladder, they must not fail to rise and empty it. Let it be borne in mind the emissions occur towards morning, and there is no doubt but that the priapism, following the accumulation of urine, is the first step in exciting the libidinous dream which is followed by the emission.

I have very little confidence in medicines, only so far as they may act in a general way to give tone to the system. In this class of remedies I should place quinine, ergotine, iron, nux vomica, and dilute phosphoric acid.

As far as the local treatment is concerned, I begin with the introduction of the flexible metallic bougie twice a week, allowing it to remain for from five to fifteen minutes at a time. The effects of this particular treatment are sometimes very striking.

The modus operandi is not so much in the coldness of the instrument as it is in the metallic oxide which forms with the oil in the instrument, and the simple presence of the foreign body to the part, allaying the irritability. We notice the same result upon the irritability of a part, when the throat, by constant introduction of the finger, becomes gradually accustomed to the presence of that member, and gagging is no longer the result.

In some cases I have introduced an eight or ten bougie, which is grooved along its curve, and in which grooves I insert a stimulating ointment. Cauterization, as recommended by Lallemand many years ago, has not, with me, been followed by the good results which that gentleman has set forth or claims for it. Still, cauterization is of service under certain circumstances, and may be employed either by means of the solid nitras argenti or by the same salt in solution. I have devised instruments to fulfil both indications; by means of one I can apply the solid nitrate

of silver, and by means of the other the solution of the salt. The first instrument is fashioned after the manner of a catheter, through which a slide passes. The instrument is open at the end; the curve and the margins of the opening are nicely curved and bevelled. The slide is provided at the end of its curve with a bead or small ball which fits accurately the opening in the catheter. Just below this bead are three or four grooves for the lodgment of nitrate of silver in powder. When the instrument is to be passed, it is first charged by filling in the grooves with the powder, and then drawing on the slide until the bead closes the opening. You then pass down to the prostatic portion of the urethra, and when you have arrived at that point, the slide is gently pushed, so that the parts can be reached with the caustic. By means of the ball arrangement at the end of the instrument, the catching of any fold of the mucous membrane between the end of the slide and the instrument itself is entirely prevented.

The instrument which I use, and have used for the last twenty years for the purpose of injecting the parts with nitrate of silver in solution, consists in brief of a catheter arrangement, with a small opening at its short curved extremity, and provided with a delicate piston, which, by proper care, can send, if necessary, not more than two or three drops of the liquid at a time against the caput gallinaginis.

I am in the habit of using the solution in various strengths, depending upon the irritability of the case, say from five to forty grains to the ounce of water. Another kind of treatment is the injection at night of cold water into the bladder to the amount of $\frac{3}{4}$ l. or $\frac{3}{4}$ iss. at night and morning.

I have not a favorable opinion of the various mechanical appliances which have been invented to act locally in these cases to prevent this pathological spermatorrhœa. The use of them is not based upon a sound philosophy.

It is the custom with some surgeons to recommend patients suffering from this disease to seek illicit intercourse. I am entirely opposed to such a course, first, because it is ineffectual, since the patient must needs be placed in a position similar to married life without enjoying all the privileges which belong to such a state. It is wrong, on the principle that the gratification of a desire once invites a repetition of the same. You eat your breakfast one morning, and you naturally have an equally strong appetite for it the next morning. In the second place, the morale of this course does not agree with my views of what is right. If young men ask for virtue, they should be willing to give virtue in exchange. This going out into the world and seeking promiscuous connexion is accompanied by a risk in which the health, life, and usefulness of the individual are staked; but the worst of all is, their misfortunes or iniquities do not stop with themselves, but are afterwards visited upon the wife and offspring.

Before closing my remarks upon this important subject and its treatment, I desire to refer to two other conditions—one physical, and the other mental, and both difficult to overcome.

The first is a discharge from the urethra while at stool, especially when the feces are hard and dry; this discharge is called seminal, and often excites very great alarm in the patient, and makes him almost frantic. The fact is, this discharge is not seminal, or only slightly so, but is a secretion from the vesiculæ seminales; and when this discharge amounts to much, it is the result of over excitement in the parts, or the consequence of urethritis, and connected with epididymitis, and is, pathologically speaking, a catarrh or kind of gleet or leucorrhœa. When this discharge is copious, there are present the ordinary symptoms of nervous prostration both in mind and body.

The prognosis on the whole is favorable.

The treatment consists in attention to the bowels, keeping them in an easy condition. Good food, phosphoric acid, and strychn. iron, and ergotine internally, and cold water injections into the rectum and bladder. The water should remain in the rectum, and not excite action of the organ.

The second condition, or mental, to which I call your attention is a species of monomania. The patient labors under the conviction that he is impotent; that he is no man; that he is disqualified for marital relations; that he can never procreate, etc., etc., and he broods over this idea, and cannot be reasoned out of it, and exhibits his unsoundness of mind by his false reasoning—it is a *genito-mania*. If under an engagement to marry, as the time draws near, he will become much excited and wretched. He often will say to you he is sure of his impotency, for he has made the experiment with some woman of the town and has failed; the erection subsided, and he retired in disgust and despair. What are you to do with such cases? Can you, by argument, lead them to correct views? Generally you cannot, and they bring forward their *experimentum crucis*, which with them is conclusive. Some persons cannot pass water if they *think* some one is looking at them. You may take the ground boldly that they are not impotent; their *experimentum crucis* proves only that, while their mind was watching the action of the penis, they were not in a condition for successful copulation. I can say, as the result of experience, I have yet to see the *first case* of impotence among that class of persons. If engaged and prepared to marry, I recommend the consummation of the act; the sooner the better; and when they retire to their nuptial bed, to be sure and keep on their own side of it. This part of my advice they never follow long; they soon become sane in mind; and often, in the course of nine months or so, they prove themselves sound in body as well as in mind.

Original Communications.

DESCRIPTION OF A NEW PATTERN OF NEEDLE FORCEPS.

By HENRY B. SANDS, M.D.,

ATTENDING SURGEON TO THE NEW YORK CITY HOSPITAL.

THE adjoining figure gives an accurate representation of a small instrument recently constructed at my request by



Messrs. Tiemann & Co., the object of which is to enable the surgeon to pass curved needles with facility through parts that either offer unusual resistance, or are so situated as not to be within convenient reach of the fingers. In certain plastic operations upon the eyelids and other parts of the face, a curved needle presents a decided advantage over a straight one; the only objection to its employment being that it is liable to rotate and change its direction while being introduced. This difficulty will be found to be obviated, I believe, by the instrument figured in the plate, which affords a means of grasping the needle with considerable firmness and force. As will be observed, it bears some resemblance to the spring-catch artery forceps, and it is used in a similar manner. The double lever power by which the blades are closed affords a marked mechanical advantage, and rotation of the needle is still further prevented by the construction of the jaws, which are like those of Dr. Simms's needle-holder.

When in use, the spring-catch closes the forceps, and the needle is securely held; after the passage of the latter through the tissues, the forceps may be immediately disengaged by slight pressure on the fore part of the catch (as suggested by Dr. Henry J. Bigelow, of Boston), and if desirable, they may be again employed to draw the needle completely through the wound. During the past year I

have had repeated opportunities of putting this little instrument to the test, and I am now satisfied that it will satisfactorily answer the purpose for which it was designed.

THE INFANTILE RESPIRATION IN HEALTH.

By J. LEWIS SMITH, M.D.,

PHYSICIAN TO THE ORPHANS' HOME AND ASYLUM.

It is well known to physicians that it is much more difficult to determine the exact nature and extent of thoracic diseases, especially in their first stages, in infancy, than at any other period of life. While in the adult the presence and limits of these affections can ordinarily be ascertained from the observation of a few facts, in the infant a careful, and in many cases a repeated, examination of all the signs and symptoms is requisite, in order to make a precise diagnosis. Of the symptoms which aid us in the investigation of this class of diseases in early life, the respiration is, no doubt, the most important. Therefore the following observations, which tend to give a more accurate idea of this function in the healthy infant, are believed to be useful, since we must fully understand the character of the respiration in health in order to appreciate the changes which it undergoes in disease. The investigation of the normal infantile respiration is beset with a difficulty which few would suspect who have not given special attention to the subject, and that is, the irregularity of the respiratory movements at this period of life. This feature is especially noticeable under the age of six months, and it is the more marked the younger the infant. When the infant is asleep the breathing is more regular than when it is awake; still, even in sleep, there is usually more or less irregularity. If the respiration in the first months of life is closely observed, the infant is seen to sigh and yawn often; it breathes pretty regularly and uniformly for a moment, and then without apparent cause the respiration is intermittent. It holds its breath when it smiles or moves its head, or sometimes even when it moves its limbs. It is very subject to hiccup. This is much more common the first weeks after birth than at any other age. So much is the breathing of the infant disturbed by these causes, that, except in sleep, the number of respirations ordinarily varies in different minutes. Particularly is this true during the first half year of life; so that, in order to ascertain the frequency of the respiration with any degree of accuracy, it is necessary to take the average of several observations. It has been our aim to make the following statistics as reliable as possible, and they relate entirely to the first year of life:—

At birth, while the function of the heart has for months been regularly performed, the lungs are still quiescent. The one organ has been active during the greater part of its growth; the other has been silently developed, and is yet untried. Hereafter, in the new order of things, so intimate is the relation between the heart and lungs, that the proper performance of the function of one is essential to that of the other. Therefore, the commencement of respiration and the return of the circulation, which is modified and temporarily arrested at birth, are nearly simultaneous. Sometimes the first respiratory act precedes a little the reappearance of the pulse, attempts to inspire commencing even before delivery is completed, and ordinarily respiration begins before the close of the first minute, the exception being after tedious or unnatural confinements, or in feeble infants. As the air cells at birth are closed, the establishment of the respiratory process is difficult. The air at first penetrates but a few pulmonary cells, and gradually more and more become inflated through the strong cries, which providentially occur, till after a variable time the respiration becomes easy and regular. If the cries are feeble, and especially if with this feebleness there be considerable congestion of the brain, the result of tedious confinement, the full establishment of the respiration is in a corresponding degree gradual and slow.

From the fact that the respiratory function is imperfectly performed in the new-born infant, the movements of the chest are remarkable. While the infra-clavicular region becomes elevated during inspiration, the infra-mammary is depressed. This feature of the respiratory movements, which in older children is a symptom of some grave disease, as croup, bronchitis, or pneumonia, is always present in the new-born, and it continues till the lungs become more fully inflated. The numbers in the following tables indicate the frequency of the respiration per minute:—

In the first half hour after birth.	From the close of the first half hour till the close of the first week.	From the close of the first week till the close of the first month.		
	<i>Asleep.</i>	<i>Awake.</i>	<i>Asleep.</i>	<i>Awake.</i>
28	52	56	60	53
30	48	44	52	60
38	52	32	40	76
44	56	56	60	44
42	40	44	32	43
32	60	36	36	64
44	64	32	52	44
28	56	64	44	52
52	50	50	36	68
40	60	52	52	49
70	52	52	28	52
60	40	36	44	56
28	44	52	52	96
44	58	56		
50		44	Extremes, 28	Extremes, 44
60	Extremes, 40	45	and 60.	and 96.
80	and 64.	48	Mean, 45.	Mean, 59.
72	Mean, 52.	60		
48		48		
40		48		
104		62		
68		44		
48		62		
62		44		
56		62		
25		48		
42		50		
44		36		
47				
Extremes, 25 and 104.		Extremes, 32 and 64.		
Mean, 43.5.		Mean, 52.		

From the close of the first month till the close of the third.		From the close of the third till the close of the sixth month.		From the close of the sixth month till the close of the first year.	
<i>Asleep.</i>	<i>Awake.</i>	<i>Asleep.</i>	<i>Awake.</i>	<i>Asleep.</i>	<i>Awake.</i>
32	44	40	48	24	34
43	56	34	44	23	36
32	40	36	78	23	43
40	64	24	52	36	38
36	52	32	43	24	36
44	32	32	44	36	32
46	64	36			
52	42		68	Extremes, 24	38
23	63	Extremes, 24	64	and 36.	44
36	56	and 40.	88		48
	44	Mean, 38.	46		48
Extremes, 23	40		68		52
and 52.	46		48		56
Mean, 39.	60		52		64
	56		50		28
	52		48		44
			43		32
	Extremes, 32		36		40
	and 63.		40		23
	Mean, 51.		60		
			68		
			60		
			44		
			56		
			62		
		Extremes, 36			
		and 88.			
		Mean, 54.			
				Extremes, 23	
				and 64.	
				Mean, 41.	

It is seen from the first of the above tables that the number of respirations per minute in the first half hour after birth is very different in different cases. This is due partly to the fact that the respiratory function is sooner fully established in one infant than in another. In other words, the interruptions and irregularities of respiration are much more frequent in one than in another during the first half hour of life. The difference in the above cases was also partly due to the fact that some of the infants were crying, while others were quiet, since crying reduces, for the time, the number of respirations. Yet there is no period in life

when the respiration, during the act of crying, is so frequent as in early infancy.

The statistics given above for the first week, show an exception to the physiological law, that the functional activity of organs is reduced by sleep, since the average number of respirations per minute is seen to have been the same in infants of this age when asleep as when awake. In a former paper prepared by us, the same fact was observed, with a slight variation in reference to the pulse. After the age of one week, the respiration during sleep is more and more reduced the older the child. There is greater comparative reduction than there is of the pulse. The statistics in this paper, and those already published by us in reference to the pulse, show that there is a wider proportionate range, as regards the frequency of the respiration, than there is of the pulse, in all the periods of the year to which our observations relate.

RATIO OF THE RESPIRATION TO THE PULSE.

		<i>Asleep.</i>	<i>Awake.</i>
The first week, subsequently to the first six hours,	Mean, pulse resp.	122	129
From the close of the first week till the close of the first month,	" pulse resp.	118	143
From the close of the first month till the close of the third,	" pulse resp.	89	51
From the close of the third month till the close of the sixth,	" pulse resp.	108	132
From the close of the sixth month till the close of the first year,	" pulse resp.	108	132
	" pulse resp.	29	41

It is seen that the ratio of the respiration to the pulse is greater in the first year of life than it is in the adult. The frequency of the normal respiration in the infant, as shown by the above statistics, will probably surprise most readers. In inflammation of the respiratory organs it often does not much exceed the average given in some of the periods. The reason why the respiration in these inflammatory affections seems so much more frequent than in health, is probably because its altered rhythm arrests attention forcibly, while the quiet and easy breathing of the healthy infant is scarcely observed.

TWO CASES OF

EXTIRPATION OF POLYPI IN THE LARYNX.

(With Wood-cut Illustrations.)

BY FRIEDRICH SEMELEDER, M.D.,

OF VIENNA.

[Translated from the Vienna Medizinal Halle, by EDWD. T. CASWELL, M.D., of Providence, R. I.]

(Concluded from page 270.)

On the 1st of November, 1863, I undertook the operation, after having forewarned the lady that she must have a large stock of patience, and must expect to undergo a second operation. The operation itself was undertaken after the same preliminaries as I have described in connexion with the first case, viz. the local application of morphia and chloroform, the fixation of the patient's head by a trustworthy assistant, and of the tongue by the patient's own fingers, Wintrich's globe apparatus on a petroleum lamp, the operating spectacles above mentioned, and the laryngeal mirror held loosely in the left hand. The efforts to produce anæsthesia were made at very short intervals for the space of two hours, but with very imperfect success; the epiglottis forceps could not be tolerated.

I removed, by means of the polyp forceps (see Fig. 3), properly adjusted, the formations Nos. 2 and 3, i.e. the one seated at the anterior angle of the glottis, and the one upon the right arytenoid cartilage, leaving of the former only a very small stump; accomplishing it, to be sure, only after frequent attempts. The greater part of the polyp No. 2 was removed by a single fortunate seizure; the wedge-shaped growth was about 1½ centimètres in length, and was first separated from its attachment, as the forceps which had seized it had reached the edge of the epiglottis.

Only a small portion of the



FIG. 11.

the appearance of Fig. 12

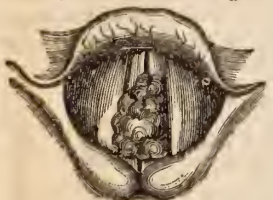


FIG. 12.

with large loops of vessels and epithelium.

On the 15th of November, 1863, I applied myself to the removal of the largest polyp No. 1, with the same preparations as before. I now knew that its consistency was quite compact, and was therefore convinced that the operation this time would prove very difficult; for it seemed probable beforehand that I should not be able to seize the polyp with the forceps on account of its remarkable size and rounded form. I determined, however, to make the attempt, and, if my suspicions proved correct, to divide the tumor with a knife, and finally remove it in fragments with the forceps. This soon became necessary. While the tumor, by a continued effort on the part of the patient to utter sound, was held firmly in the position shown in Fig. 12, I succeeded, after one or two attempts, in making, with the aid of the mirror, the two cuts represented in Fig. 11, using Leiter's knife (Fig. 8), after having inserted a lancet blade. The edges of the cut bled but little, and they did not gape at all.

I then applied the forceps, and removed, piecemeal, the greater part of this polyp. On the larger of the removed pieces, the smooth surface of the cut could be distinctly seen. The bleeding was slight; altogether a couple of teaspoonfuls might have been raised, little by little, mingled with mucus. The operation proved very wearisome for all of us, having lasted, inclusive of the attempts to produce anæsthesia, almost four hours. Still the reaction was limited to a slight pain in the larynx, which lasted about three days. The microscopic examination showed the same results as before.

When I next examined the patient, I found the appearance represented in Fig. 13.

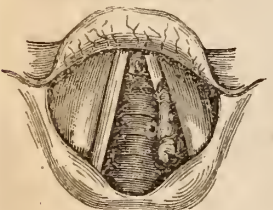


FIG. 13.

was not in the slightest degree improved. I now began to fear that the stump of the large polyp might have been so attached to the left vocal chord, or grown out of it in such a manner, that the removal of the remnant without injury to the vocal chord would be quite impossible. So I contented myself with blowing into the larynx most assiduously pulverised alum, hoping to produce shrinking of the remnant of the polyp. But it was all in vain; the voice was not restored. In laughing as well as in quick inspiration, a short dull tone could

be elicited, but that was all. Occasionally in speaking the sound was somewhat rougher, but the change was only very transient. I now sought to destroy the stump of the polyp by cauterization, and twice applied nitrate of silver in substance; eschars were formed on the spots touched, but the voice did not come back. For me it was a painful moment; the patient must be encouraged to hope on, and I, for one, had nearly given up all hope. In the meantime on the 31st of December, 1863, and on the 2d of January, 1864, I removed from the anterior angle of the glottis the lobe on the posterior extremity of the stump of the large polyp, and also the small growth which had recently sprouted. Both of these operations were conducted without assistance, and without any preliminary preparation. The lobe was as large as a small pea. I could not say why the voice did not yet return.

Meanwhile it occurred to me that when the patient had been left to herself for a couple of days, the interior of the larynx, especially the right vocal chord, was found somewhat pallid, and also that the sound of the voice was somewhat better. Hence I supposed that the larynx, in consequence of the perpetual blowing in of powder, the cauterizations, and the instrumental applications, must have been kept in a continual state of irritation, which of itself would at last affect injuriously the formation of the voice. I determined, therefore, to try non-interference with the larynx for a period of eight days, with the firm resolution at the end of that time, if no improvement had taken place, to resort to a combined operation with the knife and forceps. It was evident that this operation would now be much more difficult, as the stump was very narrow and flat, and hence that the line of my incision must be kept close to that of the ventricular chord, while at the same time I must avoid injuring it; and yet if I should succeed in all this, and still find the polyp firmly attached to the vocal chord, all my labor would be in vain, and the voice would be lost for ever. Although as an operator I had every ground to be satisfied with my experience thus far, yet, in the opinion of my patient and of the public, both I and my art would be objects of reproach if the voice was not restored. The last trump was, therefore, to be carefully played.

I therefore recommended my patient, who coincided with all my suggestions, to visit me again after the lapse of a few days, when we would come to a final conclusion. Now, I might as well confess that I was most agreeably surprised at the next visit, after an interval of several days, to hear my patient address me in a voice somewhat hollow and not metallic, but yet quite good and clear. The lady told me that for a year and a half she had not spoken so well as within the last two or three days, but that she was easily tired, and then her voice again became hoarse. An examination showed me that in consequence of the numerous and repeated applications, a superficial ulcer had been developed on the surface of the stump, from which I hope for a still further diminution of the remnant of the polyp. If the voice should not improve, and the patient should not be satisfied with its present condition, I shall be inclined to operate once more.

I think that this second case is as remarkable in its surgical as the first case was in its physiological relations. The "patience and perseverance" of the Germans, so wondered at by the French, and the German "cold-bloodedness" which astonishes them so much, have again won a triumph.

Czermak, to whom we owe all our progress in this department of surgery, can look back upon the last six years with contentment and pride. His name is for ever united with the history of laryngoscopy, and I am proud to have been his earliest student. To him I dedicate these lines with grateful affection and friendly regard.

(In the same spirit the translator would dedicate this English version to his faithful and esteemed friend and instructor, Dr. Semeleder.)

Reports of Hospitals.

U.S. GENERAL HOSPITAL, CHRISTIAN STREET, PHILADELPHIA.

REPORT ON REFLEX PARALYSIS,

By S. WEIR MITCHELL, M.D.; GEO. R. MOREHOUSE, M.D.; AND WM. W. KEFN, JR., M.D.

(Continued from page 284.)

FLESH WOUND OF BACK OF NECK; ENTIRE APHONIA AND PARALYSIS OF ALL FOUR LIMBS; SPEEDY RECOVERY, THE RIGHT ARM REMAINING WEAK.

MORGAN EMORY, æt. 20, farmer, born in New York, enlisted September, 1861, in company "C," 9th New York Cavalry, a healthy man. August, 1862, had typhoid fever, but recovered perfectly. On the seventh of July, 1863, he was wounded at Williamsport. The ball passed through the neck from side to side, posterior to the vertebrae, entering the left side one-half inch below the level of the angle of the jaw, and two inches from the posterior middle line of the neck, and emerging on the right side at one-fourth of an inch lower down, and two and a half inches from the same middle line. No bone has been discharged from the wound, nor is there any evidence of injury of the spinous processes of the vertebrae.

Effect of wound.—He fell from his horse, striking upon his right shoulder, and bruising it slightly. He was speechless for fifteen minutes, and could neither stand nor move either arm. He acquired partial use of his left arm and of his legs in three or four days, and in a week could walk; his right arm improved very little. September 21, 1863—*Present Condition.*—With the exception of slight numbness of the left hand, his right arm is his only trouble. He has no power to move the right shoulder and elbow joints; the wrist and fingers he can move slightly. He has a burning pain in the fingers, most marked when the hand is cold. Sensation of touch is generally good. The circulation in both hands is bad—the right is colder than the left—the right biceps and pectoralis major are hyperæsthetic.

Galvanic Test.—Electro-muscular contractility and electro-muscular sensibility, slightly diminished in all the muscles of the right arm. The shoulder-joint is susceptible of passive movement, and seems not to have been injured permanently by the fall; the shoulder muscles are not wasted. It seems that for some days after the wound his skin was hyperæsthetic from the level of the wound down to the waist, so that a fly on the skin gave pain, although deep pressure did not. The muscular hyperæsthesia is of later date.

Treatment.—Douche to arms; passive motion and electricity to right arm and shoulder. Three weeks later the electro-muscular contractility of the shoulder muscles was as good as on the other side. In the triceps the electro-muscular properties were lessened; in the forearm and hand both were as usual. Continued to faradize daily. The faradization was used up to November 1st, when he was furloughed. At this time the electro-muscular contractility and sensibility of the muscles were as good on the right side as on the left. He has recovered all the motions of the elbow, wrist, shoulder, and hand, but all are more feeble than those of the left arm, which is still a little numb, although far less so than when admitted.

The burning pain which at first annoyed him is rarely felt, and hyperæsthesia of the muscles is nearly gone. On his return from furlough he was still better, and within a month was returned to duty. The fall upon the shoulder was incompetent to cause all of the symptoms here described, and since, in other cases where this element of doubt was absent, we have seen paralysis caused by commotion, therefore we see little reason to hesitate in assigning it as the producing cause of the paralysis in the present case; moreover, there was no paralysis of cerebral nerves, and the loss of power lay chiefly in the range of those nerves over whose spinal origin the ball passed.

In many of the cases of injuries of the brachial plexus which we have observed, it was quite impossible that the nerve tissue could have been directly injured by the ball, and in some of these at least the resultant paralysis must have been due to brief compression of their trunks during the movement of the missile or to agitation of the nerves through the tearing of tissues more or less remote. As we shall return to this subject in a future essay, it is only necessary here to describe cases of commotion, so as to separate them from those of true reflex paralysis with which they might easily be confounded. We have met with another and very interesting form of paralysis, which might possibly be mistaken for reflex paralysis by a superficial observer. Men who are forced to use crutches, and to bear heavily upon them, are sometimes affected with numbness of one or both hands, and even with loss of motion in these members. This result is due to pressure upon the axillary nerves. It is most apt to occur in emaciated persons and those of large frame. Where it presented itself early in the case, as it may do, it might readily be attributed to reflected irritation. It is then easily relieved by laying aside the crutches, or by padding them and adding a handle by which to support the weight of the body on the hands. When the cure is delayed, faradization always affords prompt relief. We have seen that in all probability the state of shock from gunshot injuries is a state of general paralysis. We have also seen that in the great mass of cases it is temporary. We have now to show that in rare instances the paralysis continues as a more or less permanent evil, after the general depression has passed away. When, therefore, a wound occurs, and the patient, surviving the first effect, is found to have paralysis of a distant limb or limbs, it is impossible to deny to such cases the title of reflex paralysis. All of the following instances seem to us to have fulfilled every condition, which would entitle them to be so considered.

CASE I.—BALL WOUND OF RIGHT SIDE OF THE NECK, PROBABLY INVOLVING NO IMPORTANT NERVE DIRECTLY; FRACTURE OF HYOID BONE; WOUND OF THROAT. REFLEX PARALYSIS OF LEFT ARM; PROBABLE REFLEX PARALYSIS OF RIGHT ARM; EARLY RECOVERY OF LEFT ARM; PARTIAL AND REMOTE RECOVERY OF RIGHT ARM.

CAPTAIN R. N. STEMBLE, U.S.N., æt. 49. While commanding the ram Cincinnati, May 10, 1862, the ship was attacked by two rebel rams. Captain S. was aiming a pistol when a ball entered his right neck, broke the hyoid bone, and, traversing the neck, emerged three and a half inches from the middle line, above and to the right of the superior angle of the scapula, through the edge of the trapezius muscle. He fell half-conscious and confused, but soon reviving, felt that both arms were paralysed. His first impression was that he was shot through both arms. He was carried below in great pain, and spitting blood freely. The pain in the arms was made worse by movement and by passive motion. Pressure gave pain in the right arm and shoulder only, and in the right chest. Sensation was never entirely absent from either arm, but was dull in both. His medical attendant, Dr. Judkins, of Cincinnati, who took charge of his case on the 19th of May, 1862, writes as follows: "When first seen by me the anterior wound was discharging mucus and pus, with saliva. His voice was hoarse; deglutition, which returned in part on the third day, was still difficult and painful. He experienced severe pain in the supra-hyoidcan group of muscles and in the pharynx. His left arm was still slightly paralysed, having rapidly improved. On the right side the deltoid, biceps, triceps, and brachialis anticus were completely paralysed, and up to the date of this account, July 9, 1862, have improved very little. The muscles of the right forearm are nearly as much paralysed as those of the arm, and the sensibility of the right arm has become painfully acute. Captain S. seems also to have lost to a great degree the use of most of the shoulder muscles on the right side." The left arm was nearly well in four weeks, the sensibility and

movements of both improving equally, so that now, July 18, 1863, he has no loss of function in the member, except slight want of tactile sensation in the ultimate distribution of the ulnar nerve. The right arm was but little better at this date, but the fore-arm had acquired every movement except supination, which seemed to be limited about one-half, not by paralysis, but by contraction of the opponent group of pronating muscles. At this period sensation was entire in the right limb, but there was soreness on pressure in all the anterior arm muscles, and neuralgia in the arm and fore-arm. The nutrition of both arms was good, but the right was the smaller, measuring at the biceps 9½ inches, while the left measured 10½ inches.

During the slow progress of his case, Captain Stemble lost several small pieces of the hyoid bone, and although hoarse for many months, has recovered his voice, without serious change in its tone or power. His convalescence, interrupted by many accidents, and by an attack of pneumonia, continued up to the summer of 1863, and was largely due to the skill and care of his able medical attendant, Dr. Judkins. When placed under treatment, in Philadelphia, by Dr. Mitchell, July 18, 1863, Captain S. was still suffering from constant pain in the right arm. The left was well, except as to the trifling loss of sensation mentioned above. The right fore-arm, though weak, possessed every movement except supination, as did also the hand, but the arm hung at the side useless, because there was scarcely any abducting power and very little flexion at the elbow, both the biceps and long supinator being greatly enfeebled, and the former muscle, as well as the brachialis anticus, almost entirely atrophied and lost to view. Excepting the trapezius and rhomboid muscles, all the shoulder group was nearly useless and partially wasted. From July 18 to September 9 he was faradized; at first every day, and then every third day, active and passive movements, which had already been employed, being of course continued. The result was a steady gain, ending in a cure as complete as could be hoped for in a case so severe. He regained every lost motion, and could raise his hand to his chin and abduct the arm about fifty degrees. The pronators alone remained intractable, despite every effort, but as the supinators and biceps developed themselves largely, even pronation gained somewhat, though not to such an extent as the other movements. The pain and hyperæsthesia diminished, but the former still exists. It is believed that a second course of similar treatment, about to be instituted, will further amend this case, in which all other means had utterly failed.

Dr. Judkins is of opinion that the entire paralysis was due to reflected irritation. We incline to this belief for anatomical reasons, but even though we admit that the paralysis of the right arm may have been caused by commotion of the brachial plexus, it is impossible to suppose that the loss of power in the left member could have been similarly produced. The only permanent lesion on that side was the loss of feeling on the ulnar side of the palm and fourth finger. With this exception, it regained its normal functions within three or four weeks. Whatever may have been the cause of injury to the right arm, it appears to have involved more or less nearly all the strands of the plexus, which is unusual in cases of traumatic injury from a ball. Its results were also more lasting than in the other arm. A year and two months after the accident the right arm was a useless member. Faradization of the muscles affected restored their power very rapidly, so that the patient regained every movement of the limb, which is still improving; electricity having been temporarily laid aside in September, 1863.

(To be Continued.)

THE annual meeting of the District Medical Society of Hunterdon Co., N. J., was held at Flemington on Tuesday, May 10, Dr. Matthias Abott, President, in the chair.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, January 13, 1864.

DR. D. S. CONANT, PRESIDENT, IN THE CHAIR.

FUNGUS CEREBRI—ABSCESS OF BRAIN.

(Continued from page 273.)

DR. HAMILTON exhibited a specimen of fungus cerebri which was associated with abscess of the brain. The patient from whom it was removed received an injury of the skull on the 23d of Dec., and a few hours afterwards was admitted to Bellevue Hospital. A compound fracture of the right parietal bone was discovered, with a good deal of comminution. Though the fragments of bone were slightly compressed, still there were no signs of compression, save a partial paralysis of the left arm; there was no dilatation of the pupil. The depressed portions were elevated by means of the trephine and elevator. On examination of the exposed dura mater by the finger, no lesion of that membrane was discovered. The wound was simply closed by the application of a bandage, the cold water dressing only being used. From this moment the partial paralysis of the left arm began to disappear. On the eighth day after the injury, the patient was walking about the ward, the paralysis of the arm being then scarcely noticeable. This condition continued until the sixteenth day, when there was complete hemiplegia, and a disposition to sleep. A small hernia cerebri was then for the first time noticed, much to the surprise of Dr. Hamilton, who did not suppose that the dura mater had been lacerated. The mass was from a half to three-fourths of an inch in diameter at its summit, and had emerged through an opening in the membrane about one-fourth of an inch in diameter. It had a dark look, and appeared as if it contained coagulated blood. Dr. Hamilton directed an application of lime-water, cold to the head, warmth to the extremities, and low diet. On the following morning (the seventeenth day) the tumor had increased in size, the hemiplegia continued, and the patient was conscious, stating that there was no pain of any consequence in the head. On the evening of the 3d instant there was a gush of cerebral matter to the extent of two or three ounces, and death immediately ensued. During this period the hernia cerebri had attained the diameter of an inch and a half in its summit.

Dr. Hamilton remarked that the first day that he noticed the fungus he suspected the existence of a cerebral abscess, and for the purpose of confirming the suspicion, he introduced a probe into the mass to the depth of about two inches and a half; still no matter escaped on its withdrawal.

The autopsy was performed by the house surgeon. Layers of lymph were deposited upon the surface of the dura mater. On laying open the brain, the track of the probe was discovered leading into an abscess of the lateral ventricle, the roof of which cavity was seen to be destroyed. The abscess contained about an ounce of pus, and was not walled in by any cystic membrane.

In conclusion, Dr. Hamilton remarked as follows:—

I have long had a conviction that most of the cases of hernia cerebri are caused by the formation of abscesses in the brain, and this conviction is founded partly on the fact that they occur ordinarily about the period at which suppuration is apt to take place. In the case just related, this was on the sixteenth day. I have seen but one case of fungus cerebri that recovered, and that was of a man who was struck on the side of the head, and whom I saw soon after the injury. The skull was extensively broken, so that I was obliged to elevate and remove several fragments of bone. The dura mater was wounded, and some of the brain matter was escaping. On the eighth day hernia cerebri commenced, and soon increased in extent, so as to measure three inches in diameter across its summit. Some

time after, when I was examining the mass one day, and pressing my probe around its base in order to discover the whereabouts of the pedicle, a sudden gush of matter to the amount of a tablespoonful took place. From that time the man began to improve, and the paralysis which had previously existed commenced gradually to abate. I saw him three years after; some hemiplegia still existed, but in other respects the patient was doing well. There is another reason why I have this impression that fungus cerebri is ordinarily the result of the formation of an abscess—and that is, that there is no other way to account for it. It is not due specially to wounds of the dura mater; they occur every day, but it is only now and then that hernia cerebri takes place. If I am right that abscess is the general cause of the fungus, it only goes to show how inefficient must be the different forms of treatment proposed for its cure, especially that by pressure. I believe, when abscesses do exist, that they are the cause of death, and not the fungus cerebri.

DR. SAYRE thought that it would be a good plan to evacuate the matter, and in that connexion related a case of the sort following compound fracture of the skull, where the abscess was punctured by Dr. Buck; the matter kept discharging by means of a piece of sheet lead, which was perforated on its centre, and accurately applied over the softened mass.

FIBRO-RECURRENT TUMOR OF JAW.

DR. SANDS presented a tumor, on behalf of Dr. Parker, which was removed from the maxilla of a Massachusetts farmer, and gave the following history of the case:—The patient was 38 years old, of healthy parentage, excepting that his mother had suffered for twelve years before death from ulceration of the face, which was described as being cancerous in character; but it was also stated that the mother, nevertheless, did not die of the disease. The first thing observed by the patient was about eighteen months ago, and consisted of a swelling on the right side of the roof of the mouth, which he describes to have been about as large as a walnut. This he showed to a physician, who, thinking it an abscess, incised it, but nothing escaped but blood. The tumor began to increase, and the teeth at that side of the jaw became loosened, and came out. About six months ago he presented himself to Dr. Parker, and was then carrying in his pocket one or two of his teeth, together with a portion of the alveolar process, an inch long and a quarter of an inch thick. There was then evident swelling from the interior of the mouth, but not enough to interfere with his speech or respiration. Though the nostril of the affected side was nearly closed, still there was no deformity visible from the outside.

The patient was advised to go home and wait for future developments. He returned about four weeks ago, and his appearance differed very much from what it was when last seen. The tumor had decidedly increased in size, extending over to the left side, while at the same time it projected downwards an inch and a half below the arch of the palate. The mucous membrane seemed to have been pushed over to the left side. There was also such an amount of swelling of the face as to cause conspicuous deformity—the right nostril being completely stopped; the eye was unaffected. His general health was exceedingly robust, and there were no lymphatic enlargements discoverable. The removal of the tumor was accomplished without trouble, a flap being formed by two incisions, one from the inner angle of the eye to the median line of the lip, the other from the commissure of the lip upwards and outwards to the malar bone. The flap having been reflected off, and one incisor tooth drawn, the mass was easily separated. The whole cavity of the antrum was involved, except at its upper portion. The wound in the integument united throughout its whole extent by first intention, and the patient, on the fifth day after the operation, was able to go down town and transact some business.

The tumor is invested inferiorly by mucous membrane,

is of a rosy hue, elastic, and cuts with some degree of firmness. It is composed, microscopically, 1. Of fibres of connective tissue, which are not very fully formed; and, 2. Of nuclei, which are nearly of uniform size, and the 3000th of an inch in their longest measurement.

These nuclei were generally oval in shape, while some were of globular form, and contained one or two nucleoli.

Besides these microscopic characters, stamping the tumor as of the fibro-nucleated variety, Dr. Sands had met with cells which he had never seen before. They were $\frac{1}{300}$ of an inch in diameter, and appeared at first to contain serum, but in the centre of each was the appearance characteristic of the crystallization of margarine, and this disappeared totally on the addition of ether. In conclusion, he stated that he had lately assisted Dr. Parker in the removal of a recurrent tumor of the inferior maxilla, which had reappeared after the lapse of ten years, eighteen years after the first operation.

DR. POST presented a specimen of albuminous urine from a woman in the eighth month of utero-gestation, who has marked puffiness of the face and extremities. He had had no opportunity for examining it for casts, but in this connexion referred to a case of albuminuria in pregnancy, which he met with a year ago, and in which casts were actually found; still the labor terminated without any complication, and the urine subsequently became normal.

SPONTANEOUS PERIOSTITIS OF DORSAL SURFACE OF FINGER—PERIOSTITIS.

DR. POST presented a specimen of a finger which he had amputated for spontaneous inflammation of its dorsum, resulting in destruction of the bone. He regarded the case as an interesting one in connexion with the seat of the inflammation, never having met with a similar one before.

DR. SAYRE thought that a great deal of good could be done under such circumstances, by the practice of excision, and referred to a case of destruction of the last phalanx of the thumb, the result of a "felon," in which an operation of that sort was attended with a very satisfactory result.

In relation to Dr. Sands's specimen, Dr. Post remarked that he had removed a similar tumor from the alveolar process of a colored woman, who several years afterwards had no recurrence.

NEW ALKALOID FROM THE CALABAR BEAN.—Messrs. Jobst and Hesse, of Stuttgart, have instituted a chemical examination of the Calabar bean. They found the active principle to be contained in the cotyledons only. It was obtained by treating the beans with alcohol, and then acting by means of ether on the residue left after evaporation of the alcoholic solution. The ethereal solution after evaporation left pure *physostigmine*. Physostigmine is a brownish yellow mass, amorphous, and in the first instance separated in the form of oily drops. It is easily soluble in ammonia, caustic and carbonated soda, ether, benzole, and alcohol; less soluble in cold water. From the ethereal solution it is entirely precipitated by animal charcoal. The watery solution has a faintly burning taste, a clearly alkaline reaction; it gives a copious kermes-colored precipitate with biniodide of potassium, and a precipitate of hydrated oxide in solution of chloride of iron; fused with hydrate of potash, it evolves fumes which have a strongly alkaline reaction. Acids dissolve it easily, and yield solutions of salts, which have mostly a dark red, more rarely a dark blue, color. The hydrochlorate of physostigmine yields precipitates, with tannin acid, reddish white; chloride of platinum, pale yellow; chloride of gold, bluish—a reduction taking place; bichloride of mercury, reddish white. Twenty-one beans yielded only a little alkaloid. Two drops of a watery solution of the alkaloid placed on the eye caused the pupil to contract after ten minutes to about one-twentieth of its original diameter.

American Medical Times.

SATURDAY, JUNE 18, 1864.

HINTS TO REFORM.

DURING the late session of the National Medical Convention the inquiry was not unfrequently made by the older members—"How can we give more character to the Association and render its meetings more interesting and profitable?" This is, indeed, a most important question, and one that every member who has the welfare of the Association at heart should seriously consider. We have stated that the late meeting was a decided success, and such we must regard it when considered as a pleasant national reunion of the profession. But when viewed from a higher stand-point, and with a more critical regard to those elements which are to render this body the controlling power in the profession, elevating its moral, social, and educational status, the Association failed to answer the just expectations of its friends. The precious hours of its general sessions were too much occupied with loose discussions or unimportant subjects; while windy, pretentious orators, who always float to the surface on such occasions, interrupted the progress of business by points of order, motions, and trivial questions. The sections failed of that degree of interest which they should elicit, owing to the absence of well prepared papers and searching discussions by members eminent in the department of practice to which such papers belong. But these defects, and others that might be noticed, are not inherent in the Association, and may be corrected if the leading members will take a decided stand in favor of reform. We propose thus early to present this question to the profession, by offering some suggestions, in order to elicit a full and free discussion while the impressions made by the late meeting are still fresh in the minds of members.

The Association has properly a twofold character; it is both an ethical and a scientific body, and it is very important to maintain these features in full strength and harmony. But there is danger of its losing both, and gradually sinking into hopeless imbecility. It is essential to the integrity and good government of the profession that there be some great central organization to which it may refer all questions disturbing its relations or affecting its general welfare. It is not less important that we have a great central scientific body which shall be the patron of the medical sciences, and shall stand before the world as the representative of our national medical literature. To both of these positions the Association may attain if discreetly managed.

To become the ethical or governing body of the profession, one thing above all others is requisite, viz. that the Association command the respect of the profession. It cannot be the arbiter of medical opinion, nor the instructor in morals and professional amenities, without itself being above reproach. And as a corrupt body can never be purer and better than the individual members, the Association must, if it would place itself upon the highest ground, purge itself of those blighting excrescences which cling to it as to their last and only hope of respectability. In other words, the Association must have a more select representation.

At present medical societies exercise too little discretion in the selection of delegates; the position is given to any one who volunteers to attend, and such volunteer is generally the "wind-bag" of the Society. The Association should limit its representation to State, County, and well established, legally incorporated bodies, and exclude those ephemeral voluntary organizations which too often exist only to enable some objectionable person to gain a membership. It would do well to establish a title of membership; and, placing a high qualification upon it, subject its list of permanent members to a searching revision. Names stand recorded on that roll which are no longer worthy of such associations. If by such or any other means the representatives of the profession could be more select, embracing only the better class, the meetings of the Association would be dignified, its discussions deliberate, and its decisions would command respect.

Again, the Association should exercise more care in the selection of its presiding officer; and this officer should have a longer term of service than one year. However greatly an audience may be annoyed by the vaporings and impertinences of a few shallow delegates, there is still some relief in the prompt action of an efficient Chairman. But this annoyance becomes twofold more aggravating when it is aided by a stammering, doubting President, wholly ignorant of his duties. There are medical men who have a good knowledge of parliamentary rules, and such knowledge should have due weight in the selection of the President. The term is, however, too short, and might advantageously be extended. A President has little or no opportunity to signalize his administration. If he served two years there would be a stimulus to great effort to enlist the profession and to render the annual meetings profitable.

To give the Association a higher scientific character there must be elicited the very best talent of the profession in the preparation of papers. The present method by voluntary committees will never succeed. Some valuable papers have, it is true, been produced; but there is a want of stimulus to writers, which must be provided. Much might be done by a system of prizes offered by each section; but as this plan would involve an expenditure of money, it would fail. A wiser course would be to give the officers of the sections a longer term of service, and create a rivalry among the sections. The chairmen of the sections would begin early in the year to select papers for the ensuing session from the most prominent members. Promises would be made, subjects would be given out and published, other members would be secured to discuss these papers in the section, and, long before the annual meeting, a general interest would be awakened throughout the profession to listen to these papers and discussions. It would not be difficult, we are persuaded, to have every moment of the time occupied with the reading of the best papers which the profession of this country can produce, and in the discussions thereon by the ablest members.

There are many other hints to reform which suggest themselves as we pursue this subject, but which we forbear to allude to at present. We desire to do little more at this time than call the attention of the friends of the Association to the necessity of adopting some radical measures adapted to elevate its character and strengthen its position in the profession. We invite discussion of these topics.

MEETING OF THE NATIONAL QUARANTINE AND SANITARY CONVENTION.

At the meeting of the American Medical Association, steps were taken to secure a revival of this organization, which at one time promised to be one of our most important national societies. The last meeting was held at Boston, June 17, 1860, and adjourned to meet at St. Louis, Mo., we believe in 1861, but, owing to the war, like all other similar societies, failed to meet at the appointed time. The subject of sanitary science is in its infancy in this country, and its study should be fostered and encouraged by every proper means. While in the older countries the fruits of a knowledge of hygiene are seen in cleaner and healthier cities, an improved condition of the poor, and a general elevation of the laboring classes, we are but learning the first principles, and have rarely put the simplest of them into practice. We need to be stimulated to greater efforts in our study of preventive medicine and in urging the application of sanitary regulations to American communities. This great work can only be accomplished through organization, and we trust that every friend of reform will encourage this effort to revive the Sanitary Association. The meeting is to be held in Philadelphia in October.

MEDICAL DEPARTMENT AND SANITARY COMMISSION.

There is a prevailing impression in the public mind that the Sanitary Commission is essentially antagonistic to the Medical Department, aiming rather to supplant than supplement its operations. This view is false, and prejudicial to the interests of this great voluntary organization. In another column will be found a letter from an agent of the Sanitary Commission, which sets forth clearly the nature of the labors of the Commission, the difficulties which often attend the work of the Medical Department, and the harmony which exists between the two. The Medical Department never worked more vigorously than at present; its supplies are furnished in the greatest profusion, it surmounts the greatest obstacles with the most persistent energy, and still there is need of the additional aid furnished by voluntary societies to fully meet the extraordinary emergencies created by the series of sanguinary battles through which we are now passing.

Reviews.

LECTURES ON MEDICAL EDUCATION, OR ON THE PROPER METHOD OF STUDYING MEDICINE. By SAMUEL CHEW, M.D., Professor of the Principles and Practice of Medicine in the University of Maryland. Philadelphia: Lindsay & Blakiston. 1864. pp. 152.

The subject of medical education, and the best means of elevating its present standard, has from time to time been discussed in the columns of this journal, and indeed is engaging the attention of the profession throughout the country. Hence a manual on the subject, designed as a guide to the student in the prosecution of his studies, is well timed and likely to attract attention.

The volume before us consists of five lectures, the first of which is merely introductory, with some general remarks on the power of industry, with examples, and discusses briefly the question of special talents, etc.—Lecture II. treats of reading as a means of study; points out many of the errors in its use, as the improper selection of books,

too much reading, etc. It discusses the general character of books, gives some directions for their proper selection and study.—Lecture III. continues the subject of reading, and gives some directions for reading to advantage. It shows the ill effects of reading without thinking, in leading one to a servile submission to authority, and the consequent loss of freedom of mind. It recommends the morning as the best time for reading, when both body and mind are refreshed by sleep, and the brain most vigorous. It also discusses the importance of lectures as a help in the study of medicine, and of reading, notes, dissections, examinations, etc., in connexion with lectures.—Lecture IV. points out the importance of clinical experience, and urges the necessity of a hospital to every medical school.—Lecture V. is devoted principally to medical schools and the preliminary education of their pupils.

We have thus given a brief summary of what the book contains; and would merely add, that while it points out no easy method of becoming great, but on the contrary recognises the fact that excellence cannot be achieved without severe and constant effort, it gives some plain directions, which, if followed, will enable the student to make the best use of his time, and to so arrange his labors as to reap from them the most happy results. We venture the assertion that no student will lay aside the work after a careful perusal, without feeling encouraged in the prosecution of his studies, and thankful that a volume of the kind has been placed in his hands.

It is with profound regret that we have been called upon to record the death of the author since his work was placed upon our table. He has left a valuable legacy to the rising generation of physicians.

THE EAR, ITS DISEASES AND THEIR TREATMENT. Illustrated by Engravings. By FRANZ ADOLPH VON MOSCHIZSKER, M.D., Oculist and Aurist; Author of a Guide to Diseases of the Eye and their Treatment. Philadelphia: Martin & Randall. Boston: Brewer & Tileston, 1864. Pp. 319.

This little work consists of a brief description of the anatomy and physiology, together with the diseases of the ear and their treatment, to which are added extracts from the pamphlets of Drs. Toynbee and Yearsley on the Artificial Membrana Tympani; that of Dr. Casper Morris on Scarlet Fever; also a copious glossary and a list of aural literature extending from the 16th century to the present time. The work appears to be up to the present standard of aural therapeutics, and possesses the rare quality of brevity. We think, however, that its style is more adapted to the popular reader than is desirable in any professional work, especially in its parenthetical explanations of such words, *tininitus*, *otorrhœa*, *cerumen*, *cataplasma*, etc.; neither are we fond of such words as *earshell*. We must also beg leave to differ from the taste that makes use of the handsome face of the author for a frontispiece. However, *de gustibus*, etc. The volume is well got up, with a fair readable type, and contains in a small compass much that is found in more pretending works.

Correspondence.

SANITARY COMMISSION AND MEDICAL DEPARTMENT OF THE ARMY.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR—The following letter, which appeared in the Washington *Chronicle* of to-day, deserves a wide circulation, and I send it to you, with the request that it be inserted in the MEDICAL TIMES.

J. C.

OFFICE U. S. SANITARY COMMISSION,
WASHINGTON, D. C., June 6, 1864.

SIR—My attention has been called to the tone of exaggeration in which some persons, both in public papers and in

private circles, speak of the work of the Sanitary Commission, as if the Commission were doing everything and the Government nothing for the wounded soldiers. These statements do not emanate from, nor are they endorsed by, the Sanitary Commission. On the contrary, while the Commission records, and is glad to be able to record, the aid it has rendered to the wounded, and while it seeks by public reports to assure the people that it is alive and worthy the trust placed in its hands, the Commission is never found depreciating the vastly greater service rendered by the Government through the regular channels of aid and supply.

The Sanitary Commission gives no countenance to that tone of wholesale denunciation in which "visitors" to the army speak of the neglect and utter delinquency of public officers in caring for the wounded. The Commission sees what it considers defects, and it is forced to recognise in individual officers and on specified occasions, what it believes to be delinquencies and neglect, and the sufferings consequent; but it also sees and recognises, as few others can, the immense labor which devolves upon the Medical Department in times like these, and the immense work which is done. It realizes, as others may not, that the transporting of twenty-five thousand wounded men from the battle-field to distant hospitals involves unavoidably delays and suffering; especially when, as now, the army is moving rapidly forward with frequent change of base, compelling, as a "military necessity," the instant transportation of wounded men from the vicinity of previously occupied fields to general hospitals, no matter how severe may be the wounds or how impassable the roads, or how deficient the means of transportation. No man who has not been upon the ground, and day after day seen the labor to be undergone and the difficulties to be met, can form the slightest idea of the terrific work laid upon the medical officers after a great battle.

Sometimes at a single wharf, as was the case at Belle Plain, a business equal to that of a city of fifty thousand inhabitants has to be carried on. There are the quartermasters and the commissaries, with their crowds of boats and immense stores; wagons, in trains a mile long, pushing in from the shore, and impatiently waiting to be loaded; reinforcements, five to ten thousand men in one single day, arriving to be disembarked and moved forward to the battle-field; prisoners by the thousand also, to be brought down to the boats under guard—and meantime, with it all, at this same wharf must place and time be found for receiving the wounded as they are brought in, two or three hundred ambulances and wagons at once, followed immediately by as many more, with a crowd of those men, who, with wounds less severe, have walked with slow steps from corps and division hospitals. This is a mere outline sketch, to be filled in with the breaking down of wagons on shore, blocking whole trains; tearing up of corduroy roads, opening thus the way to mud and quicksands; the arrival of unexpected wounded, and non-arrival of expected boats; the rush and moving to and fro of these masses of men, and teams, and stores; the slow cautious handling upon stretchers, borne down in long file, of men with amputated limbs or terrible wounds; the feeding of the hungry, and trying to alleviate their sufferings—all this continued by night the same as by day, through the darkness and the rain.

A person who has never been in the midst of all this, and who has not repeatedly been in the midst of all this, has no power and no right to judge of what the officers of the medical and of other departments are doing; still less power or right to judge and criticise belongs to the individual who, with excited feelings of philanthropy, goes from some quiet home of his own down to the "front," expecting by a week's work of humane and irresponsible labor to set everything to rights, and relieve all suffering. To such a man the whole scene is, of course, confusion, and neglect, and ruin, while in reality it is simply war—with what, in a great measure, are its unavoidable consequences.

The Sanitary Commission knows, from long acquaintance with such scenes, the work which the Medical Department has to do, and the embarrassment under which it labors.

With a steady hand in its own assigned place does the commission seek to coöperate with the Medical Department. All the employés of the Commission are instructed not to criticise, but to work; and to work, subjecting themselves to military rule. So far as I know, a spirit of cordial good-will is felt by all the officers and real workers of the Commission in the field for the medical staff with whom they have direct relations. The Sanitary Commission, in proper place and in authorized manner, does not hesitate to point out the deficiencies and neglects which it sees. It seeks honestly and earnestly to secure needed reforms. It advocates constantly what it constantly sees the call for, as, for instance, a *larger provision* for the sick and wounded, embracing a larger corps of surgeons and of nurses—more hospital transports, exclusively assigned for the whole term of war to the Medical Department; and an independent and ample "transportation train," involving a large outlay, as entirely under the control of the Surgeon-General and his officers as is the ambulance train. The Sanitary Commission thus points out what it considers defects, and seeks to secure reforms, yet it works in good faith and cordial earnestness, in its own more humble way, with the Medical Department as a whole.

In order to illustrate this, let me call your attention to the following extracts from letters and reports concerning the work of the Commission, in which reference is made to medical officers. You will see that the tone is that of coöperation. I will turn first to the last report received from the agent of the Commission, in charge of the work at Port Royal, Virginia, a few days since. He says: "All day Friday we fed and issued supplies to the wounded, without stint. All the departments have treated us with a cordiality, and more than cordiality, a willing confidence and cheer, that makes us quite buoyant in approaching them and working with them. Dr. Cuyler, Dr. Phillips, the representative of Dr. McFarland, at this post, and Dr. McKay, have been especially obliging. Dr. Cuyler, on finding us so diligently at work, told me to draw on him for anything I needed. He loaned us additional stoves, caldrons, etc., furnished us beefsteak and coffee to any extent that we desired, and facilitated our operations in all proper ways, giving us information of the arrival of trains freely and promptly.

"I have never before seen the organic and proper relations between the Medical Department and the Commission so smoothly, thoroughly, and harmoniously adjusted. It was official and responsible; we were *supplementers*, not *supplanters*, and the attachés of each seemed to have a strong feeling of mutual respect and heartiness."—*Report of James A. Anderson, Port Royal, Va., May 28, 1864.*

* * * * *

I am, dear sir, respectfully your obedient servant,
FREDERICK N. KNAPP,
Assistant Secretary U. S. Sanitary Commission.

REPORT OF MEDICAL EXAMINATION OF PERSONS CLAIMING EXEMPTION FROM DRAFT.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR—I was appointed by his Excellency GOVERNOR MORGAN, in October, 1862, one of the surgeons to examine claims of exemption from draft, and reported for duty in the district comprising the 15th, 16th, and 18th wards of Brooklyn; and possibly a short statistical report of the diseases found in men claiming exemption may be of some interest to your readers.

We were allowed but fourteen days to do our work, and, with our private practice, we were obliged to hurry it through, and I regret I am not able to give as full a history of what I found as I could wish. I examined nearly 900 men, and 800 of them were passed as *unsound* and their names stricken from the roll. When two or more

distinct diseases were found in the same person, either of which alone would entitle him to exemption, each disease was noted under its proper head. For example:—Disease of the heart, tuberculosis, and a disabled limb may all exist in the same person, and if so, they were classed under three heads. Where two diseases exist in complication, or were the result of the same pathological cause, they were classed together as far as practicable. Of the whole number, I found with chronic bronchitis, 10; spasmodic asthma, with more or less bronchitis, 12; cataract, 7; opacity of cornea, impairing vision in one or both eyes, 17; loss of sight, or vision much impaired in one or both eyes from causes not appreciable, 8; short-sighted and obliged to wear glasses to read or write, 49; valvular disease of heart, with hypertrophy from acute rheumatism, 46; valvular disease of the heart, with no appreciable hypertrophy and no rheumatism, 30; hypercardia, with no endocardial or exocardial murmur indicating any valvular disease, 8; incipient phthisis, with more or less hæmorrhage in the majority of cases, 69; phthisis advanced, 45; disabled limb or joint, from old fracture or other cause, 133; varicose and indolent ulcers, 21; varicose veins, large and extending above the knee, 26; chronic rheumatism, disabling and distorting one or more joints, 23; sanguineous piles, troublesome, 28; piles, with considerable hæmorrhage monthly, 2; varicocele and cirsocele, 14; inguinal hernia on one side, 50; inguinal hernia, double, 9; scrotal hernia on one side, 52; scrotal hernia, double and congenital, 5; club-foot, varus, 5; valgus, 6; pes equinus, 2; deformed feet and lapped toes, 5; hearing lost or much impaired, 35; rachitis, 6; fistula in ano, 7; hemiplegia or paraplegia, 4; hypertrophy of liver, with more or less ascites, 37; anæmia, with *bruit de soufflet*, 7; epilepsy and subject to fits, 8; amaurosis, 5; stricture of urethra, 3; uremia, 4; chronic conjunctivitis, 8; hydrarthrus, 2; chronic laryngitis, 2; hypertrophy of testis, 3; vertigo, and impaired mental faculties from old injury to head, 7; etc., etc.

It was a matter of great surprise to me that so many should complain of short sight, and I began to think it was feigned; each man was asked to write his name, which he would do with his face close to the paper. A book with fine print was then had, so as to touch his nose, and if he could read he was certainly short-sighted. Again, the knitting of the brows, when trying to see objects at a distance, besides a few characteristic wrinkles about the eyes, will help much in making out the case. Nearly all these subjects were men of literary pursuits, or engaged in business requiring almost constant use of the eye. Many of these cases are congenital, others become short-sighted at school, and some have become so since they went into business. Query—Do these persons choose a pursuit that they can carry on with their work close to their eyes, from choice or necessity? or do such pursuits, such constant use of the eye, tend to make that organ more convex, or the humors of the eye more dense, and thus produce or increase myopia? The large number suffering from enlargement of the liver attracted my attention. They were most of them German tailors and shoemakers, and great lovers of "lager beer;" many of them had been treated a number of times for ascites, and were still very tender to pressure over the liver and stomach. Possibly, three years of "active service" would have been a cure for most of them.

Another class of men, equally fond of "lager," but who lived an active life and were much exposed to cold and wet weather, suffered from acute and chronic rheumatism, and very many of them had heart disease. But they had no disease of the liver, as a general rule, and no dyspepsia. Probably not more than two-thirds of those claiming exemption from disease came forward to be examined. To recapitulate—heart disease, 1 in 10; phthisis, 1 in 8; disabled limb, 1 in 6; varicose veins and ulcers, 1 in 17; hæmorrhoids, 1 in 27; rheumatism, 1 in 34; varicocele, 1 in 50; hernia, 1 in 7; club foot, 1 in 60; hearing lost or impaired, 1 in 23; hemiplegia or paraplegia, 1 in 200; ra-

chitis, 1 in 134; fistula in ano, 1 in 114; hypertrophy of liver, 1 in 22; myopia, 1 in 16; amaurosis, 1 in 160; cataract, 1 in 100; opacity of cornea, 1 in 47; chronic laryngitis, 1 in 100; epilepsy, 1 in 100; Bright's kidney, 1 in 200; chronic bronchitis, 1 in 80; spasmodic asthma, 1 in 66, etc. It is proper to state that all abnormal sounds of the heart, with no other signs of heart disease, were put down as valvular disease alone; and where the apex of the heart was found more than three and a half inches from the medium of the body, with a full impulse over the cardiac region, and no abnormal sounds, it was classed as simple hypertrophy.

Yours, etc.,

O. H. SMITH, M.D.

106 WEST 34TH STREET, N. Y.,
May 16, 1864.

PHILADELPHIA.

*Special Correspondence.**

[To the Editor of the AMERICAN MEDICAL TIMES.]

IN previous letters I chronicled death's doings among the "medicos," and now I must add yet another name. Dr. John Redman Coxe departed this life March 23d, in his ninety-first year. For many years Dr. Cox has occupied the position of a recluse, in strange contrast with his former activity. He was a graduate of the University, having received the degree in 1794, as a student of Dr. Rush. He held at various times positions of importance in the profession, and in 1809 received the appointment of Professor of Chemistry in the halls of his *Alma Mater*; after the lapse of ten years he was transferred to the chair of Materia Medica, from which position, in 1835, he was displaced by one of those unfortunate occurrences which happily are rare in our Philadelphia schools. Some five years ago I visited him, and was surprised to find a hale and hearty old gentleman, who still dwelt with terrible earnestness upon the wrongs he had suffered at the hands of men who, though young, and some of them yet mere tyros in the profession, had displayed a degree of vindictive feeling scarcely paralleled in any similar institution in the scientific world. He gave me a copy of his pamphlet issued in defence of his position, and I left him, more deeply impressed in my belief that he had been "more sinned against than sinning." The vacancy in the College of Pharmacy has been well filled by the selection of Mr. Edward Parrish, whose election I predicted in my last. This choice gives universal satisfaction, and will add materially to the interests of the school.

The vacancy in the "Jeff." has brought forth a host of applicants; among the most prominent may be named Alfred L. Kennedy, M.D., Professor and President of the Polytechnic College; B. Howard Rand, M.D., Professor of Chemistry in the Central High School, and recently Professor of the same branch in the Pennsylvania Medical College and the Philadelphia Medical College; John J. Reese, M.D., late Surgeon U.S. Vols., formerly a lecturer on Chemistry and Professor in the Pennsylvania; Robert Bridges, M.D., well known as a private lecturer and author of works on this branch; Prof. Booth, famed as an analytical chemist, etc.

The Medical Clubs have been unusually brilliant and well attended this season, and have doubtless contributed their full share towards the "*entente cordiale*" in the profession. May they long continue.

At present the "Sanitary Fair" occupies the whole attention of every one not irretrievably given over to speculating in stocks, and we "villagers" confidently expect to do something. The ladies, especially those known as Mrs. Dr. —, are earnest and untiring, and we unfortunate males, willingly or otherwise, must perforce yield up our purses, if not our time, to their urgent demands. What the medical department will do I cannot say, though I see Dr. C. P. Tuft has been made chairman of a committee to attend to the "regulars."

* This letter has been inadvertently delayed.

I presume you New Yorkers are preparing for the advent of a large number of delegates at the meeting of the American Medical Association. I learn that very many are expecting to go from this city, and already the desire to fill vacancies in the various delegations is something terrible. Should it continue, a vacancy will command a high premium. By the way, what a farce it seems to see our societies gravely go through the form and labor of electing a long list of delegates who do not care even to acknowledge the honor (?) thus thrust upon them, and rarely trouble themselves by resigning, to permit others to be elected who will attend to the duties of the position. Perhaps some excuse might be found when the Convention is to meet far from home, but what can be thought of physicians who coolly suffer themselves to be elected, yet never attend a meeting which is convened in their own city? Can such an instance be found in any other learned profession? I am sure not, yet year after year the same honor is offered them, again to be carelessly spurned. This is one cause of the want of vigor, of life, of great deeds in the mass of our state and other associations. Again, too much time is wasted in frolicking, feeding, sight-seeing, and attending to other business. Now, in the last meeting of the Pennsylvania State Medical Society, the most indecent haste was evinced, and particularly on the part of city delegates, to wind up the session. I heard one "Conservative" delegate express his hope that the morning of the second day would adjourn the society, "lest politics should be introduced." Valuable reports were passed over with a cursory glance, and referred to the Publication Committee; others, which perhaps had better never been brought, were read at their meagre length, and consigned to a similar fate. Too much effort is made to entertain the delegates socially rather than scientifically, and the real object of the session is lost sight of. Let us hope for better things this year.

APRIL 22, 1864.

Army and Navy.

ARMY.

ORDERS, CHANGES, &c

ASSIGNMENTS.

Surgeon Thos. H. Bache, U.S.V., as Surgeon-in-charge, General Hospital, Chester, Pa.
Acting Assistant-Surgeon Leon Brockman, U.S.A., to the General Hospital, Jeffersonville, Ind.
Surgeon N. P. Rice, U.S.A., as Surgeon-in-Chief, U. S. Forces at Yorktown, Va.
Surgeon G. R. Weeks, U.S.V., as Surgeon-in-Chief, District of Little Rock, Ark.
Surgeon H. J. Memminger, 2d N. C. Vols., as Surgeon-in-Chief, Sub-District of Newbern, N. C.
Surgeon S. D. Turney, U.S.V., as Post Medical Director, Murfreesboro', Tenn.
Assistant-Surgeon C. H. Hood, U.S.V., as Surgeon-in-charge, Division No. 4, General Hospital, Murfreesboro', Tenn.
Surgeon Wm. A. Conover, U.S.V., as Chief Operating Surgeon, 10th Army Corps.
Surgeon G. F. French, U.S.V., as Superintendent of Hospitals at Huntsville, Ala.
Surgeon W. Threlkeld, U.S.V., as Surgeon-in-charge, Barracks Hospital, Nashville, Tenn.
Hospital Steward H. W. Mygatt, U.S.A., to Little Rock, Ark.
Surgeon J. H. Brinton, U.S.V., Edward Curtis, U.S.A., and Brinton Stone, U.S.V., to temporary duty at White House, Va.
Surgeon E. B. Dalton, U.S.V., as Chief Medical Officer, White House, Va.
Surgeon H. A. Schlafflin, U.S.V., as Assistant Medical Purveyor, Department of the Gulf.
Surgeon Francis Greene, U.S.V., as Surgeon-in-charge, Totten Hospital, Louisville, Ky.
Assistant-Surgeon Gerhard Saal, U.S.V., as Surgeon-in-charge, Seminary Hospital, Columbus, Ohio.
Surgeon N. S. Barnes, U.S.V., as Surgeon-in-Chief, 3d Division, 18th Army Corps.
Assistant-Surgeon W. S. Woods, U.S.V., as Surgeon-in-charge, Post Hospital, Benton Barracks, Mo.
Surgeon William Dickinson, U.S.V., as member of Board for examination of Surgeons and Assistant-Surgeons of Colored Troops at St. Louis, Mo.
Surgeon A. W. Hynes, 23th Kentucky Vols., to the Totten General Hospital, Louisville, Ky.
Acting Assistant-Surgeon E. R. Moody, U.S.A., to Joe Holt General Hospital, Jeffersonville, Ind.

Surgeon A. C. Benedict, U.S.V., as Medical Inspector, 18th Army Corps.
Surgeon C. W. Jones, U.S.V., as Assistant Medical Director, Department of the Cumberland.
Assistant-Surgeon C. F. Haynes, U.S.V., to Artillery Brigade, 5th Corps, Army of the Potomac.
Assistant-Surgeon T. A. McGraw, U.S.V., as Medical Inspector and Pathologist of General Hospitals, Chattanooga, Tenn.
Assistant-Surgeon J. H. Janeway, U.S.A., as Surgeon-in-charge, Depot Hospital, Point of Rocks, Va.
Assistant-Surgeon James Collins, U.S.V., to General Hospital, White House, Va.
Assistant-Surgeon L. D. Sheets, U.S.V., to 4th N. Y. Heavy Artillery, Artillery Brigade, 2d Corps.
Surgeon E. Nicolls, U.S.V., as Surgeon-in-charge, General Field Hospital, Chattanooga, Tenn.
Assistant-Surgeon A. B. Chapin, U.S.V., to Artillery Brigade, 10th Corps.
Surgeon G. S. Palmer, U.S.V., as Medical Director at Annapolis, Md.
Surgeon J. D. Strawbridge, U.S.V., to 18th Corps.
Assistant-Surgeon A. I. Comfort, U.S.V., as Surgeon-in-charge, Post Hospital, Columbia, Tenn.
Surgeon A. M. Clark, U.S.V., to Headquarters of Lieutenant-General Grant.
Surgeon James M. Laing, U.S.V., as Surgeon-in-charge, 6th Corps Hospital, White House, Va.
Surgeon L. D. Harlow, U.S.V., as Surgeon-in-charge, General Hospital, Lookout Mountain, Tenn.
Surgeon J. H. Grove, U.S.V., as Surgeon-in-charge, Post Hospitals, Camp Douglas, Ill.
Assistant-Surgeon H. Z. Gill, U.S.V., as Executive Officer, General Hospital, Camp Dennison, O.

APPOINTMENTS.

Acting Assistant-Surgeons P. Glennan, Brinton, Stone, D. R. Brower, T. R. Pooley, and Moses F. Cogswell, U.S.A., Surgeons E. M. Powers, 7th Missouri Vols., Benjamin Durham, 72d Illinois Vols., J. B. Petherbridge, 65th New York Vols., E. A. Clark, 8th Illinois Vols., M. B. Cochran, 1st Iowa Cavalry, H. W. Davis, 18th Illinois Vols., J. H. Ledlio, 99th Illinois Vols., and George Derby, 27th Massachusetts Vols., and Dr. A. McMahon, of Ohio, to be Assistant-Surgeons of Volunteers.
Dr. D. A. Morse, late of Madison General Hospital, Madison, Ind., has been appointed Surgeon of the 162d O.V.I., stationed at Camp Chase, O.

ORDERS.

Lieutenant-Colonel G. K. Johnson, Medical Inspector, U.S.A., is relieved from duty in the Department of Virginia and North Carolina, and in addition to his duties in the Middle Department is assigned to duty in the Department of West Virginia, with his Headquarters at Baltimore, Md.

In addition to his duties in the Department of the South, Lieutenant-Colonel Peter Pino, Medical Inspector, U.S.A., is assigned to duty in the Department of Virginia and North Carolina, with his Headquarters at Norfolk, Va.

Surgeon George A. Wheeler, U.S.V., is relieved from duty at the General Hospital, Annapolis, Md., and will report to the Commanding General, Army of the Potomac.

Surgeon E. F. Sanger, U.S.V., is relieved from duty in the Department of the Gulf, and will report to the Commanding General, Middle Department.

Lieutenant-Colonel John Wilson, Medical Inspector, U.S.A., will make a special inspection of the hospitals in the Northern Department, and will report the result of such inspection to the Surgeon-General, U.S.A.

LEAVE OF ABSENCE.

Hospital Chaplain N. West, U.S.A., for three days, with permission to visit Washington.

DISCHARGES, DISMISSALS, ETC.

Hospital Steward W. H. Cook, U.S.A., dishonorably discharged for general bad conduct.

Assistant-Surgeon Alonzo Boothby, 2d U. S. Colored Troops, honorably discharged, having tendered his resignation on surgeon's certificate of disability.

Assistant-Surgeon J. I. B. Ribble, 8th New Jersey Vols., to enable him to accept another commission.

Surgeon J. Leander Bishop, 7th Regiment Pennsylvania Reserve Corps, mustered out and honorably discharged from June 7, 1864, the term of service of his regiment having expired.

Surgeon Eugene B. Harrison, 6th Ohio Vols., and Assistant-Surgeon Jasper M. Grove, 7th Indiana Cavalry, honorably discharged on account of physical disability on the report of a Board of Officers.

Hospital Steward John J. Sellers, U.S.A., dishonorably discharged for repeated absence without leave.

NAVY.

Regular Naval Orders.

Assistant-Surgeon G. H. E. Baumgarten detached from the Monongahela, and waiting orders.

Assistant-Surgeon C. S. Hubbard ordered to the Navy Yard, Boston.

Assistant-Surgeon C. E. Stedman detached from the Navy Yard, Boston, and ordered to the Circassian.

Volunteer Naval List.

Acting Assistant-Surgeon John P. Schenck resigned.

Acting Assistant-Surgeon J. W. Langley ordered to the New Hampshire.

Isaiah Dewling appointed Acting Assistant-Surgeon, and ordered to the South Atlantic Squadron.

Acting Assistant-Surgeon D. J. Harris detached from the North Carolina, and ordered to the South Atlantic Squadron.

Acting Assistant-Surgeon W. W. Howard ordered to the South Atlantic Squadron.

Acting Assistant-Surgeon W. N. Pindell detached from the Hume, and ordered North.

Acting Assistant-Surgeon John W. Hamilton detached from the Catskill, and waiting orders.

Original Lectures.

LECTURES ON GUNSHOT INJURIES OF THE ABDOMEN.

By FRANK H. HAMILTON, M.D.,

PROF. OF MILITARY SURGERY AND FRACTURES AT BELLEVUE HOSP. MED.
COLLEGE, AND LONG ISLAND COLLEGE HOSPITAL; SURGEON
TO BELLEVUE HOSPITAL; LATE MEDICAL INSPECTOR,
U.S.A.

LECTURE VI.—PART IV.

Treatment of Artificial Anus consequent upon Gunshot and other Perforating Wounds of the Belly.

MANY ingenious plans have been devised from time to time by surgeons, for the cure of an artificial anus, most of which, no doubt, have their application in certain cases. Yet I must confess that experience has greatly modified my original views as to the urgency of the demand for surgical interference of any kind. It is my present opinion that the majority of these cases will get well spontaneously, and not an inconsiderable proportion very speedily, if simply allowed to take their own course; and I believe, therefore, that in all cases it is best to defer surgical interference for a period of several months at least.

The following examples will, perhaps, in some measure illustrate the value of these remarks:—

CASE I.—*Artificial Anus closed spontaneously in eight days.*—Lewis Morell, 119th N.Y.V., received on the 1st day of July, 1863, at Gettysburg, a rifle ball, which entered four inches to the right of the umbilicus, and passed out behind, at or near the sacro-iliac synchondrosis. On the same day, having occasion to relieve his bowels, he noticed that fecal matter in a fluid state escaped from the posterior wound. During the following eight days, the same occurred whenever he took anything into his stomach. The escape of feces by the wound then ceased, and after a lapse of eight months, when he came under my notice, this annoyance had never returned. Up to this time his bowels had remained uniformly regular, and his health was now quite good. The anterior wound had long been closed, but the posterior wound had never ceased to discharge matter. One large fragment of bone has escaped by this opening, and it is probable that others still remain, and that this necrosed bone is the sole cause of the perpetuation of the fistula.

No treatment was ever adopted in this case, except the use of cool water dressings, during the first few days.

CASE II.—At a meeting of the surgical section of the New York Academy of Medicine, held Nov. 28, 1863, Dr. Trowbridge, of Conn., presented a young man who had received a ball through the abdomen, and which had resulted in the formation of an artificial anus. The wounds closed at one time completely, and again opened, but finally closed again spontaneously, and now, after the lapse of several weeks, showed no tendency to reopen. The movements of his bowels were regular, and he declared himself in the enjoyment of perfect health.

CASE III.—Sergeant Hank Davy, 100th N.Y.V., was admitted into the U.S. General Hospital, at Beaufort, S.C., July 24, 1863, having been wounded by a conical ball which entered in front, just below the pubes, at the root of the penis, and escaped behind, passing through the os coccygis. The posterior wound was one and a half inches in diameter, and feces were constantly passing at this opening. The bladder and urethra were not wounded.

Aug. 15th.—The scrotum became inflamed, and soon an abscess opened at its most depending point, and discharged feces. Sept. 16th.—Both orifices have ceased to discharge feces. Oct. 6th.—He was admitted into McDougall General Hospital, Fort Schuyler, and I saw him about this time. He was then very feeble, and the posterior wound was again discharging feces; anterior wound discharging offensive pus.

Nov. 1.—Went home on a furlough, and during his
AM. MED. TIMES, VOL. VIII., No. 26.

absence several small pieces of necrosed bone from the arch of the pubes escaped by the anterior wound, and the posterior wound closed permanently about the middle of January, 1864, the fecal discharges having continued in all about six months. April 18th, 1864.—He is still in the hospital, but completely recovered, except that his strength is not fully restored, and the wound through his scrotum continues to discharge about a drachm of healthy pus daily. The treatment throughout has been simple, no surgical operation or interference having been required.

Several other similar cases have, from time to time, come under my notice, but I have preserved no notes of them.

CASES IV., V., VI.—Surgeon C. S. Wood, U.S.V., reports in the AMERICAN MEDICAL TIMES, April 9th, 1864 three cases which came under his observation after the battle of Gettysburg, in which a complete cure has been effected spontaneously. Although it is not stated at what precise period the fecal discharges ceased, it is inferred from the report that in none of the cases did the discharges continue longer than a few weeks. The treatment consisted mainly in the free use of opiates during the first few days, employed for the purpose of controlling inflammation and to prevent extravasations. No surgical interference was made in either case.

CASE VII.—Dr. Waters, A. A. Surg., U.S.A., reports a case in which a ball entered two inches above the umbilicus, and emerged three inches from the spine; feculent matter escaped through the posterior orifice; the patient became greatly emaciated, but both orifices healed after a time; the posterior orifice subsequently reopened, and again discharged feces. Finally this man recovered completely, and left the hospital "in perfect health."—AM. MEN. TIMES, July 4, 1863, p. 7.

CASE VIII.—Dr. Rulison, Surgeon-in-chief to the 2d Cavalry Brigade, Buford's Division, has reported in the number for November 21, 1863, of the same journal, one example of wound by a carbine ball (Sergeant Gilbert, of the 1st Mich. Cavalry), in which the missile penetrated near the umbilicus and was lodged. Feces discharged from the wound for several days, and then ceased, the wound having closed spontaneously.

Certain cases will be presented, however, in which surgical interference will sooner or later be demanded; especially does this interference become necessary when the fistula exists in the upper portions of the alimentary tube; in which cases it is observed that the greater fluidity of the contents facilitates their escape, and the system is more seriously impoverished by the withdrawal of the alimentary substances before any considerable amount of their nutritious elements has been taken up by the lacteals.

At first there exists only an adhesion of the outer wall of the intestine to the abdominal parietes; but gradually, as the wound in the intestine cicatrizes, it becomes narrowed in its circumference, and the inner wall is made to approach the external orifice, until at length the tube forms with itself at this point an acute angle, of which the inner wall constitutes the apex, and projects so far into the external wound as to form a sort of septum between the upper and lower portions of the canal. The contents of the intestine in their descent find it impossible to double this sharp promontory, and glide outwards through the wound. The lower portion of the canal falling into disuse, becomes gradually contracted through its entire length, and thus after a time presents another serious obstacle to a permanent recovery.

To these pathological changes is sometimes added, in old cases, a protrusion of the mucous membrane, resembling prolapsus ani.

If the fistula shows no tendency to close, the surgeon will first endeavor to favor this event by placing over the orifice a well adjusted pad, covered with oiled silk, so as to restrain effectually the escape of the feces, while at the same time the pressure must not be so great as to block up and completely obstruct the natural channel.

In the event of the failure of this method, he may, in case the orifice is small, excise the edges of the tegumentary wound and bring them together firmly with sutures and adhesive plasters, adopting in this case all the necessary precautions to ensure speedy union between the opposing surfaces.

Finally, when the fistula has existed a long time, and the septum projects so far as to render the reestablishment of the original channel impossible until it has been removed, a graduated compress should be made to press fairly into the wound, until it comes to bear effectually upon the septum; or a hollow, flexible cylinder, or an elastic cylinder composed of curled hair and covered with oiled silk, may be introduced a certain number of hours each day, the cylinder being well secured from falling into the intestine by a strong ligature made fast without.

If none of these methods succeed in overcoming the obstacle, or if they occasion excessive irritation whenever they are employed, we can only adopt, as our last alternative, destruction or division of the septum by a ligature. For this purpose we employ to the best advantage a piece of silver or other metallic wire, with which we may gradually, from day to day, increase the ligation of the portion of intestine within its grasp, and thus secure its more prompt and effectual separation. In making this operation it may be necessary to enlarge the original wound, so as to enable the operator to introduce the thumb and forefinger of the left hand, with which he will seize upon the septum, and, pressing it between his thumb and finger, determine whether he is compressing anything but this single knuckle of intestine; the needle, supported by a long and firm handle, and armed with the wire, will then be made to transfix the septum just beyond the fingers; after which, being brought out upon the opposite side, the two ends will be twisted together only very moderately, so as to make the slightest pressure, it being desirable not to strangle the intermediate structures, but only to determine sufficient inflammation to secure adhesion between the serous surfaces. After the lapse of a few days the ligature may be tightened by a few additional turns, and in this way the surgeon may proceed until the separation of the ligature is accomplished. Indeed it would no doubt be entirely safe, after the ligature had remained in place a fortnight, to cut the septum, and thus release the ligature with a pair of scissors.

It will now remain to close the external wound by the same operation, or by some modification of that which I have already described.

The forceps or clamps recommended by Dupuytren, and employed occasionally a few years ago, has, by almost universal consent, been laid aside as dangerous, from the rapidity and severity of its operation.

Mr. Guthrie calls attention to an instrument invented by Mr. Trant, for the purpose of pressing back the septum, without interfering with the passage of the feces through the intestinal canal, and which proved successful in one instance in the hands of the inventor. He thinks it deserves a further trial.

I ought not to omit also the caution given by Mr. Guthrie, not to employ excessive force in the attempt to displace the septum, lest we should cause a rupture of the adhesions existing between the parietes of the abdomen and the intestine, and thus give rise to fecal extravasations within the peritoneum. The pain, nausea, and prostration occasioned by undue pressure will probably always give sufficient admonition of this danger.

Mr. Longmore mentions one case of permanent fecal fistula as having come under his notice in the Crimean war. He refers also to two similar cases reported by Williamson, as among the wounded returned from India, and to one other in a private, wounded at Caleel in 1840.

In the following examples, balls have entered the abdominal cavity and become lodged, but have finally made their exit by the anus:—

CASE I.—In March, 1863, I saw in one of the hospitals

at Louisville, Ky., Corporal English, who was wounded at the battle of Stone river, three months before, by a large conical ball, which entered the belly on the left side, near the anterior superior spinous process of the ilium, and escaped by the rectum on the fortieth day. Matter was continuing to discharge by the rectum; he was still confined to his bed, and urination was attended with some pain, but the external wound had closed, his bowels were regular, and he seemed in a fair way for recovery.

CASES II. and III.—Surgeon Duchachet reports two cases, one in the person of a lieutenant, 14th Ind. Vols., wounded at Chancellorsville by a conical ball, which passed per rectum on the fifth day. The ball was "very much battered and out of shape." The wound healed kindly, and a month later he went home on a furlough. The second case was in the person of a corporal of the 2d N. Y. Cavalry, who was wounded at Rockville, Md., July 28, 1863, by a conical pistol ball, which entered the back, between the third and fourth lumbar vertebrae, and passed by the rectum on the seventh day. He subsequently so far recovered as to be sent home on a furlough.—AM. MED. TIMES, Sept. 19, 1863, p. 134.

CASE IV.—Surgeon Rulison mentions one other example as having been presented in the person of a Confederate soldier wounded at Gettysburg, and who remained a prisoner in our hands. A Minié rifle-ball entered just below the ensiform cartilage, and escaped, *per ano*, on the second day. This man had, at the time of the report, so far recovered as to be able to walk about. The ball was considerably battered.—AM. MED. TIMES, Nov. 21, 1863, p. 242.

CASE V.—Longmore reported a case of this kind in the *London Lancet* for 1855, vol. i., p. 606, and vol. ii., p. 437, in which the patient passed both the ball and a piece of cloth. This man died of albuminuria four years after the receipt of the wound.

This is the same case to which Mr. Guthrie has referred as the only one reported from the Crimea.

When a ball enters the rectum, just above the sphincters, it is very apt to be followed by the formation of extensive sinus and troublesome fistula. Great care ought therefore to be taken in all such cases to insure a free discharge of matter by large and depending incisions.

After the battle of Manassas, on the 29th of August, 1862, my attention was called to a wound of the rectum near the anus. A private in the 105th N. Y. Inf. received a ball in the left nates, which traversed the rectum and lodged itself in the right nates, and could not at first be found; but in a few days after suppuration was established, it dropped out from the anus spontaneously. An extensive abscess formed in the loose areolar tissue of this region, which continued to discharge pus and feces for many months, forming thus a complete fistula in ano.

FIBRINOUS COAGULA OF THE HEART are attracting much attention from pathologists. At a recent meeting of the London Pathological Society, Dr. OGLE presented a number of specimens illustrating the formation of fibrinous coagula in the cavities of the heart, at a long period before death. Most of these had undergone considerable softening, the centre of some of them consisting of a puriform fluid, bounded by a firm, smoothish surface like the walls of an abscess. Their firmness, color, adherence to the walls of the heart, and changes taking place with them seemed to afford conclusive evidence of their formation having occurred some time before death. As the increased frequency of the heart's action in inflammatory affections prevents the formation of these coagula, it has been suggested that a too liberal use of arterial sedatives may have the effect to favor their formation.

DR. SCHREBER, of Leipzig, recommends the use of clay as the most "energetic, the most innocent, the most simple, and the most economical of palliative applications to surfaces yielding foul and moist discharges."

Original Communications.

BISULPHURET OF CARBON AS A REMEDIAL AGENT.

By WM. R. SMITH, M.D.,

OF CAIRO, ILLINOIS.

THE object of this communication is to call the attention of the profession to an article the merits of which do not seem to be generally known, as it is not mentioned in any of the standard works on practice, nor in any of the medical journals. It is, I believe, conceded by all, that our first duty to our patients is, if possible, to relieve their sufferings; for it is only when persons are racked with excruciating pain and are suddenly relieved that the true worth of the physician is fully appreciated. There is not a physician, I think, who has not felt the want of some article that will give immediate relief in severe cases of spasmodic and bilious colic. We have such an article in the bisulphuret of carbon. It matters not how intense the spasm or severe the pain may be, within less than five minutes after the application of the bisul. of carbon the patient will be entirely relieved, and the case can then be treated on general principles. My mode of using it is as follows: R. Carbon bisul. \mathfrak{z} i.; tinc. camphor \mathfrak{z} ij.; M. With this solution I saturate a handkerchief and apply it over the seat of the pain, and tell my patient when it begins to burn to let me know, for it is then time to remove it, as it burns like liquid fire; but the pain from its application only lasts a moment, and with it go all the original pain and spasm of the disease. The part should then be frequently bathed with the solution to prevent the return of pain, till your general remedies act, when the cure is soon effected. The advantage of the bisul. of carbon over all other articles used for the same purpose is, its certain and speedy action. I have used it for the last eight years, and it has never failed me in a single case. Its application and usefulness are not confined merely to relieve pain and spasm, but in all collapsed conditions of the system; if there be one spark of vitality left, it can be roused by applying the solution to ankles, wrists, and spine. It will act when sinapisms and blisters would be powerless. I could instance other uses of the bisul. of carbon, such as its application along the track of the affected nerve in neuralgia, and the application of its vapor in inflammation of the eye; but this article is now longer that I intended it should be. All I ask of my professional brothers is to give it a trial, with the assurance that it will not fail them in time of need.

ON THE CONCENTRATION OF LIGHT,

By AN IMPROVED METHOD,

FOR AURAL, LARYNGOSCOPIC, AND OTHER EXAMINATIONS.

By M. H. HENRY, M.D.

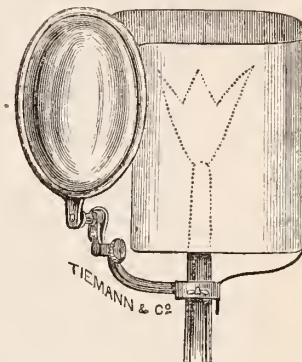
OF NEW YORK.

No apology need, I think, be offered for asking a little space in this journal for the purpose of laying before its readers an account of what I regard an improvement in the means of concentrating light for aural, laryngoscopic, and other examinations.

The thought of attaching a lens or bull's-eye condensor in front of an ordinary light, for examining the external ear or throat, suggested itself to me some years ago, and I have used it with much success.

I recently explained to Mr. Tiemann, the instrument-maker, my idea of attaching A POWERFUL LENS ON A BALL AND SOCKET-JOINT, AND THIS ADDED TO A STRONG RING WITH A THUMB-SCREW, so that it might be portable and easily placed on any kind of burner (gas) or lamp. I suggested also a shade and reflector combined, to be placed behind the flame; the light being thus intensified and protected against currents of air disturbing the examination.

I have just read with pleasure and profit the concluding part of a "Lecture on the Laryngoscope," delivered at the Royal College of Physicians by Dr. George Johnson, Professor of Medicine in King's College, and published in the London *Lancet* of May 28, 1864, in which he describes so well the different means of producing a powerful light, that I am tempted to borrow his description rather than present my own. I am also influenced to do so from the fact that he speaks of the bull's-eye condensor as an excellent means of producing a strong and better light than that obtained by "Tobold's Condensor." The illustration will convey a more perfect idea of the improvement than any word-description I could offer in the same space.



Dr. Johnson says:—"In the practice of laryngoscopy, whether in the examination of one's own larynx or that of others, *it is of primary importance that the operator should have the power of readily changing the direction of the light, so as at once to adapt it to the varying position of the body, which is often required for the thorough exploration of the larynx.*" A feeblor light, which can readily be reflected in any required direction, is of more practical value in laryngoscopy than a stronger light which is fixed.

Some laryngoscopists on the continent, and Dr. Walker of Peterborough, do not use the reflector for the purpose of lighting the throat; but in place of it they get a direct illumination of the fauces by means of a concentrated fixed light. A globular bottle of water in front of a lamp is used as a powerful condensing lens. In this way, certainly, a very bright light is obtained; but the objections to this mode of illumination are:—1st. *That the apparatus is clumsy and cannot be carried about;* and 2d. *The chief objection is that the direction of the light cannot be readily and instantaneously made to follow the movements of the patient's head.* The fact of the light moving with the movements of the operator, which some consider an objection to the method of illuminating the throat by means of the reflector on the forehead, does, in fact, constitute one of its chief advantages.

With regard to the source of light, I find it not difficult to see and to demonstrate my own larynx, as well as to examine the larynx of another by the light of an ordinary candle; but a bright light renders the examination much easier and more satisfactory. The best artificial light is a moderator lamp or an argand gas-burner. The light may be much intensified by placing a metallic reflector behind the lamp and a bull's-eye condensor at the proper focal distance in front, the flat side of the lens being next the lamp. *I find that with a single bull's eye condensor I get a better light than with Tobold's Condensor,* which consists of three lenses in a brass tube, and which is a more cumbersome, as well as a more costly apparatus.

Those passages which appear in italics I myself marked; for, whatever merit there may be in the improvement, it cannot, I think, be more easily recognised than by contrasting it with the other modes of illumination; by taking into consideration its adaptability to all cases requiring a ready change in the direction of the light; and lastly,

though not of less importance, its lightness and small size, enabling its being placed in the pocket when necessity requires an examination abroad.

In using the laryngoscope with this light, there is no need of any reflector on the forehead. The hands of the operator are perfectly free to depress the tongue and apply local remedies. In examinations of the eye, the light falling on the ophthalmoscope through the lens becomes softer, steadier, and of a whiter hue—three important considerations to the ophthalmoscopist, and adding in no small degree to the comfort of the patient subjected to the examination.

42 West 16th St., N. Y.
May, 1864.

Reports of Hospitals.

BELLEVUE HOSPITAL.

ERYSIPELAS.

SIMPLE cutaneous erysipelas is, in this hospital, oftener seen upon the face than elsewhere, though its occurrence upon the extremities is not unusual. It is seldom that a healthy, temperate person, living in a good atmosphere and upon wholesome food, is attacked with this disease; on the contrary, the majority of our cases occur either in such as have the equilibrium of the general health disturbed by some irregularity or excess, or, as is more common, in those whose constitutions are vitiated and undermined by privation and intemperance, together with their concomitant train of evils, which may be comprehensively expressed by the term—bad hygiene.

The constitutional nature of the disease is apparent from its mode of access—by headache, chills, anorexia, etc.; its self-limitation—the inflammation and swelling pretty uniformly subsiding by the end of the first week; and the decided tendency to asthenia which invariably characterizes its more advanced stages. Although an attack of cutaneous erysipelas weakens and accelerates the pulse, and debilitates the system, yet it is none the less true that the natural tendency is to recovery; so much so, that we would not feel justified in losing an uncomplicated case. The therapeutics is readily deduced from the pathology; we perhaps have fallen into a routine treatment, probably due to the fact that after our method the patients all do well. We will suppose a patient just admitted with facial erysipelas; after a few clinical inquiries, the nurse is directed to apply to the face a cloth wetted with the following lotion:—R. Plumbi acetati 3 i.; tr. opii 3 ii.; aque Oj.; M.; and to give internally tr. ferri muriatis, gtt. x. ad xv. every two to three hours, extra diet, as eggs, milk, and beef tea, with stimulants, are ordered pro re nata, and the bowels kept in a soluble state. This embraces the local and constitutional treatment through which nearly all such patients pass. In speaking of routinism, reference was specially made to the tinct. of iron. The specific effects claimed for this drug in erysipelas are by no means susceptible of proof; the popular error *post hoc, propter hoc*, has crept in here, and, together with usage, has lulled us into the indiscriminate exhibition of a remedy which, to say the least, is of doubtful efficacy in a large proportion of cases. It is not intended to deny that the iron is useful in a *certain class* of cases, but that it is at all *necessary or required in every instance*. We have already seen a sufficient number of patients affected with erysipelas, to whom no iron was administered, recover without an untoward symptom, to justify whatever scepticism we may entertain towards the ferruginous tonic.

Nearly the same remarks are applicable to the local treatment. We do not suppose that the lead and opium wash possesses any inherent curative virtue peculiar to itself. We use it simply for its cooling and soothing influence; cold or tepid water, or any evaporating lotion, is

just as efficient in mitigating the local symptoms as the wash of lead and opium. All that is required in the way of treatment is, to watch the pulse and general symptoms and support the system while the disease is running its natural course. The practice of endeavoring to limit the spread of the inflammation by lines of nitrate of silver obtains with us neither favor nor success.

When the disease upon the face is complicated with erysipelas of the mucous membrane lining the mouth and fauces, the prognosis becomes at once grave and alarming. Of the only two cases which have lately occurred in the hospital, one recovered after a severe illness, and the other died. A brief history of these cases may be of interest.

CASE 1.—A. P., æt. 18, admitted May 11th, 1863. Was attacked with facial erysipelas on the 10th inst.; the face is so much tumefied as to entirely close the eyes. Pulse 110, and patient irritable. Ordered lead and opium wash to the face; tr. ferri mur. gtt. x. every two hours, with opiates and beef tea. 12th.—She complains of pain and soreness in the mouth and fauces, with difficult deglutition; the tongue is red and swollen; but she is unable to open the mouth widely enough to allow an examination of the fauces; refuses to take food; retching and vomiting whenever an effort is made to make her swallow; nutrient enemata cannot be retained. The tinct. of iron is now suspended. During the three days following, the pulse ranged from 112 to 120, and attempts were persistently made to nourish her by the mouth; but it was with the greatest difficulty that we succeeded in getting the stomach to tolerate the smallest quantities of food; iced milk seemed to be better borne than anything else. 16th.—Pulse 120 and very weak. She has to-day a noisy respiration; the greater part of the food, which consists of equal parts of milk and port wine iced, is wasted in efforts to make her swallow. R. Morph. sulph. gr. one-eighth every hour, and a blister over the stomach. The case is considered hopeless, as she appears to grow worse.

18th.—Pulse 120, but the throat and gastric symptoms are better, and the swelling of the face begins to subside. She now began to take more milk and wine, and gradually improved up to the 22d, when convalescence was fairly established. In this case cloths wrung out of whiskey were laid over the chest and abdomen, and covered with oiled muslin, with a view to get the stimulant absorbed by the integument, and we think with success. No tinct. of iron was given after the first day of treatment.

CASE 2.—James W., æt. 42, admitted Jan. 20, 1864. Suffering from gonorrhœal ophthalmia of long standing. Feb. 12th was attacked with facial erysipelas, which, during the 13th, extended over the entire head; by the 15th it had passed down upon the neck, and he complained of dyspnoea. In the p.m. the pulse was 124; moderate delirium, with increased dyspnoea; mouth sore and very red. Milk was now given freely, and he relished it better than anything yet taken. 16th.—Passed the night quite comfortably; breathing no worse; erysipelas continues to extend down towards the chest. 17th.—Died at 1 p.m.; was seen an hour before death; was then breathing easy and died of exhaustion. This patient was treated with lead and opium wash, tinct. of iron, and the fauces brushed with a solution of nitrate of silver, grs. xx. to the ounce.

In cellulo-cutaneous or phlegmonous erysipelas, the treatment early and imperatively demanded is free incisions of the tense and tumefied parts, followed by poultices, with good food, tonics, etc. We are in the habit of using, as a poultice, oakum wet with warm water and covered with oiled muslin.

We will conclude with the following interesting case. Richard H., æt. 40, admitted March 30th, 1864, with a lacerated scalp wound over the junction of the coronal with the sagittal suture. The wound was about two inches in length, and extended to the pericranium. On the 31st he was attacked with facial erysipelas upon the left side, attended with much constitutional disturbance—headache, vomiting, and a rapid pulse. By the next day

the erysipelas had travelled over the mesian line, and up upon the forehead to the edge of the hair. April 6th.—The inflammation began to subside, and a rapid convalescence ensued. At no time was the scalp injury at all affected by the disease, although the inflammation extended to within an inch of the wound. When we consider the liability of scalp wounds to consecutive erysipelas, and that this liability was so materially enhanced in the present instance by a residence in the hospital, it is extraordinary that this injury and erysipelas should coëxist in such close proximity, and mutually remain unaffected and independent of each other.

U.S. GENERAL HOSPITAL, CHRISTIAN STREET, PHILADELPHIA.

REPORT ON REFLEX PARALYSIS,

By S. WEIR MITCHELL, M.D.; GEO. R. MOREHOUSE, M.D.; AND WM. W. KEEN, JR., M.D.

(Continued from page 294.)

CASE II.—FLESH WOUND OF RIGHT THIGH, WITHOUT WOUND OF ANY LARGE NERVE; COMPLETE PARALYSIS OF ALL FOUR LIMBS; SPEEDY RECOVERY OF THE LEFT ARM, TARDY RECOVERY OF THE OTHER LIMBS; SUBSEQUENT ANALGESIA OF THE RIGHT SIDE.

JACOB DEMMUTH, æt. 21, Swiss, enlisted July, 1861, company "D," 108th New York Vols., a man somewhat below the average standard of height, of lymphatic temperament, and moderate intelligence. Reports himself as healthy up to the date of his wound, which took place at Fredericksburg, December 13, 1862. He was marching at double-quick when a fragment of shell, as large as a musket ball, struck his right thigh, at the junction of the upper and middle thirds, directly over the femoral artery. The fragment did not enter deeply, but merely lodged in the leg, and was removed a day later without injury to the vessel.

Effect of Wound.—He fell half conscious, and although aware that he was wounded, he could not fix on the site of the injury until he had examined the limb. He felt instantly a burning pain in both feet, in front of the right chest and in the right arm, and in the right thigh about the wound. At first he was entirely powerless, but after a few minutes the power of the left arm returned, leaving him paralysed as to motion in the right arm and in both legs. He lay on the field twenty-four hours, the weather being very cold. Sensation was defective in all the parts paralysed as to motion. He had no pain in the back, but the burning pains alluded to above continued for a long time, and were always eased by cold applied to the wound. While the wound was healing he had headache and difficult, painful micturition. The wound closed in four weeks. During this period he regained the power to move the right arm feebly and slowly, although perfectly as to extent. The pain in the side and feet also diminished, and the former disappeared altogether at a later period. He could not stand, however, or lift his legs from the bed at the time the wound healed, but there was then no headache or difficulty with the bladder or rectum. January 28, 1863, he was sent to WASHINGTON, where he improved so as to be able to walk with the help of a cane. His subsequent transfer to West Philadelphia caused a relapse; the pains returned, the paralysis increased, and he walked with difficulty on crutches. June 4, entered the Christian St. Hospital.

Present State.—Movement.—The patient is partially paralytic. He has some power to move the thighs when lying down, but cannot lift the legs from the bed. Below the knee all motion is lost, except a slight power of flexing the smaller toes in both feet. Pressure upon the cicatrix causes feeble twitching of the anterior muscles of the right thigh; both legs are subject to cramp and twitchings, which increase at night. The left arm is strong; the right arm has all the normal movements, but all are slowly and feebly executed.

Sensation.—He has shooting pains which start from the seat of the wound, and dart down the thigh to the knee.

No other pain exists at present, but there is still a good deal of burning sensation in both feet alike. Localizing sensibility perfect everywhere. Tactile sensation normal, or very nearly so, in all parts of his body; no loss of sense of pain in the skin. Pressure or pinching of the muscles gives him more than the usual pain, so the muscles (of both legs, especially below the knees) may be regarded as affected with hyperæsthesia of common sensation. The left arm is in all respects normal; the right arm is also free from lesions of sensibility.

Nutrition.—There is no special atrophy of individual groups of muscles, but both legs are slightly wasted; the right arm not at all so. The legs below the knees are relaxed and cold; the feet are congested, but not swollen to any marked extent. Along the edges of both soles there are singular purple and blue mottled spots, which he says existed from the time his boots were first taken off, twenty-four hours after he was wounded. It is possible that these marks are due to frost-bite. The muscles of the legs are about equally irritable to induced electric currents. Unfortunately, no very perfect electric examination of their condition was made at this period.

Treatment.—Regarding the case as one of reflex paralysis chiefly, he was ordered to have rough frictions, with cold to the spine, and to take the twentieth of a grain of strychnia three times a day. Under this treatment the cramps and twitchings increased, so that after three weeks the strychnia was abandoned. Every future attempt to repeat its employment caused the same increase of annoyance, without correspondent benefit, so that it was finally laid aside as useless or worse. About the middle of August a blister was placed on the cicatrix, with the effect of greatly relieving the burning in both feet. At the same time he was ordered to use the hot and cold douche to the spine alternately, and faradized daily. The electricity was persistently employed during two months, and a month later he was also treated with iron and quinine, porter, and liberal diet. The electric treatment caused a rapid amelioration of his case, so that he soon left his bed and began to walk on crutches. Early in November he ceased to improve, and the treatment was abandoned. At this time he could use his right arm well and quickly, and walked unaided, although with a little unsteadiness of gait. No close examination was made as to his sensibility until Dec. 3, 1863, because during this time he had been able to give aid in the wards, and made no complaint, except of more or less constant aching in the dorsal and lumbar regions of the spine. About December 3, he was closely inspected for discharge, when the following notes were taken:—

Motion.—Good in left arm; not so perfect in right arm. Both legs somewhat weak, so that he shuffles a little in walking, the worst movement being that of extension in the toes of the right foot.

Sensation.—Tactile sensibility feeble in the right leg and right arm, but nowhere entirely lost; it is normal in the left leg and left arm. The sense of touch is first found to be feeble below the navel, on the right side. It lessens in perfection to the knee, and is better below that part, especially on the inside of the calf, being worst in the foot. Tickling the sole causes no sensation of tickling on either side.

Pain.—There is absolute loss of sense of pain in the right leg, belly, chest, and arm, with somewhat lessened sensibility to pain on the left side also. In many localities he was able instantly to tell by the altered sensibility when the needle point crossed the median line; in others this was more difficult. So complete was this analgesia, that the most intense faradization of the nails of the right hand or of the right nipple caused not the least sensation. The penis remained sensitive, but all over the right side he could be cut or stuck full of needles without evincing the least consciousness of anything but a touch. The sense of temperature was good in the left leg, confused and uncertain at the upper third of the right thigh, and lost below the knee, where a heat of 110° Fahrenheit was felt as a

touch only when the sponge wetted with hot water was applied. On the foot of the right side this degree of heat was unfelt in any form. Higher heat caused reflex movements, which did not tend to remove the limb from the irritant, but were merely convulsive in their character. Intense cold also gave rise to these irregular movements.

Electric Examination.—There was some difficulty in determining the state of the muscles as to their electric sensibility, owing chiefly to the want of intelligence in the patient, and to the fact that he spoke an impure German patois, which made it no easy task to obtain from him a clear statement of his feelings. The electro-muscular contractility is slightly diminished in the right leg and arm; it is much impaired in the extensors of the toes on both sides; everywhere the muscles respond slowly. The patient was discharged Dec. 14, 1863.

American Medical Times.

SATURDAY, JUNE 25, 1864.

ARMY MEDICAL MUSEUM.

SIR HENRY HOLLAND recently remarked to a prominent member of Government, that nothing had interested him so much in his present visit to this country as the Army Medical Museum at Washington. No one who carefully reviews this magnificent collection of specimens, illustrative of the improvements in the missiles of war and their destructive effects, and also the pathology of diseases incident to armies in the field and in camp, can fail to form a high estimate of the value of this national museum. And yet it is stated that the remark of the distinguished foreigner saved the collection from destruction. We would fain doubt if there can be so slight an appreciation of this great National Museum as this statement would imply on the part of any member of Government. Of this, however, we are certain, that the profession are not sufficiently informed of the value of this collection of morbid anatomy and of illustrations of military surgery. Few medical men have any knowledge of its extent and completeness, for little has been published in regard to it, and it is seldom visited by physicians. We earnestly desire to awaken such an interest in the medical profession in regard to this institution as shall not only prevent its being sacrificed, but lead to its being more vigorously sustained by Government.

The plan of the Museum originated with SURGEON-GENERAL HAMMOND, and may be regarded as one of the fruits of that effort which placed at the head of the Medical Department a thoroughly scientific man as well as an accomplished medical officer. The scheme was regarded by many as visionary, but the majority of the army surgeons have given it their unvarying support. The temptation is very great to retain those specimens which fall to each surgeon in his practice for future study and as trophies of his skill; but the medical staff, with their accustomed generosity, have contributed without reserve everything of value to the Museum. The original project of GEN. HAMMOND was to establish an Army School in connexion with the Museum, at which a course of special lectures were to be given on military surgery and hygiene, and on anatomy, materia medica, jurisprudence, etc., to those who were about to enter the army service. In this part of his

undertaking he followed the English and French plans of a government school in which the future army surgeon was to receive special training for his subsequent duties. A corps of competent teachers were engaged, and the commencement of the course of lectures had been fixed. But with the removal of the SURGEON-GENERAL from active duties at the head of the bureau, the school was abandoned. This failure to organize a school in immediate connexion with the Museum will prove a great misfortune to the future medical staff. No ordinary school can thoroughly prepare its graduates for all the duties of an army surgeon. Much of the instruction must be of a special character, with means of illustration, such as this Museum and the neighboring military hospitals present. We hope yet to see the plan of an Army Medical School fully carried out at the seat of Government.

The Museum is divided into the Medical and Surgical portions, the specimens being arranged upon either side of a gallery. The Surgical Division is in charge of FREDERICK SCHAFHIRT, late Curator of the University of Penn., and formerly associated with LANGENBECK, a most skilful artist in the preparation of morbid specimens. Nothing, indeed, can exceed the delicacy of touch manifest in the preparation and mounting of the specimens in this division. Each preparation is so arranged as to admit of the most accurate study, without disturbing its position and relations.

The surgical specimens, taken as a series, illustrate forcibly a vast number of disputed points in military surgery, and afford abundant food for reflection to the thoughtful surgeon. Here he may learn that trephining is not to be discarded in gunshot wounds of the cranium; that balls lodged should be early removed, even if an extended search is necessary, and especially when in contact with bone; that delay in the union of compound fractures is often due to the interposition of foreign bodies, as balls, necrosed bone; that resections of the knee-joints after gunshot wounds are, for the most part, failures. We cannot estimate the value of such a collection, when complete in all departments of surgical practice, on the progress of American military surgery. The number of specimens now mounted exceeds 1200, and there is a large and rapidly accumulating collection awaiting preparation.

The Medical Division is in charge of A. J. SCHAFHIRT, son of the Curator of the surgical portion, who exhibits the same rare abilities in the mounting of specimens. In this division the preparations are for the most part wet, and for the first time we here find specimens so displayed that we can study them with the utmost ease, and to the same advantage as the *dry* specimens upon the opposite side of the gallery. Though the number of specimens in the medical is much more limited than in the surgical, yet we find here series of the greatest importance illustrating the pathology of the diseases of the camp and the field. The first series represent those diseases of the larynx described by DR. R. K. BROWNE, who presented them as "gangrene of the larynx." They are regarded by DR. WOODWARD, however, as scorbutic ulcerations—a very common complication, in his opinion, of many diseases. A second series beautifully illustrates the lesions in camp-fever, typhoid, or typhomalarial. A third exhibits tubercular ulcerations of the intestines at several different points in the same subject. But we cannot specify the many subjects for study which these beautifully prepared specimens suggest. An accurate descriptive catalogue is kept, in which is entered the history

of each specimen, as given by the surgeon who presents it, and a minute account of the critical examination to which it is subjected before it is finally placed upon the shelves.

The Museum fund is limited, consisting of small appropriations by Congress, but the very best use is made of the means at its disposal. Great economy is practised in the purchase of materials, and by the redistillation of alcohol, a supply is obtained from that which is rejected for other purposes, or is contraband.

SANITARY SURVEY OF NEW YORK.

The Citizens' Association has undertaken, among other reforms, a complete and thorough sanitary inspection of New York City. The work is being done by competent medical men, under the direction of a Central Medical Council attached to the Association. This council is entitled, "The Council of Hygiene and Public Health," and the officers are—President, DR. JOSEPH M. SMITH; Secretary, DR. E. HARRIS. The Sanitary Survey is designed to inquire minutely into the health of the people, rich and poor alike; the condition of dwellings, and especially tenement houses; the state of the streets, etc., etc. It is intended by this investigation of medical men to arrive at positive knowledge of the amount of preventible disease existing in New York, the location of insalubrious quarters, the peculiar habitats of typhus, small-pox, etc., etc., and the conditions on which the alarming prevalence of these diseases depends. This survey has already developed some startling facts, and will, we believe, be productive of a great good, especially to the laboring classes. The Association has opened a "Complaint Book" at its rooms, 813 Broadway, and the people are invited to make their complaints under promise of prompt relief. This voluntary sanitary inspection commends itself to the medical profession, and, we hope, will receive its hearty coöperation.

Correspondence.

THREE CASES OF DIPHTHERIA.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR—On the 12th day of February last I met in consultation Dr. Graettinger, of this place, who a few days previously had lost a son four years of age by diphtheria, and was greatly alarmed at two more of his children, a daughter of five and a half years and a son of two and a half years, being attacked by the same disease about twenty-four hours previously to our meeting. I referred him to an article by Dr. Farnsworth, published in No. VI. Vol. VIII. of the AMERICAN MEDICAL TIMES, recommending the employment of persulphate of iron in this disease, but Dr. G. declined its use. In the meantime I had been called to a patient, a boy six years old, whose tonsils, uvula, and throat were entirely covered with diphtheritic exudation, with symptoms of variola. I commenced the treatment according to Dr. Farnsworth's method. The following day Dr. G. informed me that the disease was advancing in both of his children, and requested me to visit them. I found the older child was very low, the younger more hopeful. To the latter I immediately applied the persulphate of iron, and gave the liquor ferri muriat. internally. With the former child Dr. G. continued his usual mode of treatment, viz. caustics locally and tonics internally. After a few hours the progress of the disease in the younger child was arrested, and perhaps changed for the better, while the older one was manifestly getting worse, and seemed almost

beyond hope. In this critical state we commenced with her the same treatment, and eighteen hours afterwards I found both patients improving, and in about four days they were *fully restored to health*. My patient with variola recovered in about the same time, and two days after the disappearance of the diphtheria the variola commenced to dry. The three patients now enjoy perfect health. I might also mention that patches of diphtheria appeared near the genitals of the boy of Dr. G., but soon healed after the application of the persulphate of iron. On the fifth day after the children were attacked, there appeared on the right tonsil of the mother a distinct diphtheritic exudation, accompanied by a painful tumor, which, however, disappeared after one application of the same remedy. In the name of my colleague, Dr. Graettinger, I express my sincere thanks to Dr. Farnsworth, whose article referred to above has, I believe, been the means of saving the lives of these children. Yours, etc.

R.

MILWAUKIE, 1864.

Army and Navy.

CIRCULAR LETTER.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., June 13, 1864.

To facilitate the arrest of deserters from U.S.A. General Hospitals, the Surgeon-in-charge, as soon as desertion is ascertained, will report the fact direct (and with copy of Descriptive List) to the Provost-Marshal of the district in which the hospital is located, and to such other Provost-Marshals as might be of immediate aid in making the arrest.

This in addition to the Regular Reports of Deserters sent to the Provost-Marshal General's Bureau.

By order of the Acting Surgeon-General:

C. H. CRANE,
Surgeon, U.S.A.

CIRCULAR LETTER.

HEADQUARTERS, DEPARTMENT OF THE OHIO,
MEDICAL DIRECTOR'S OFFICE,
KNOXVILLE, TENN., JUNE 1, 1864.

Upon the death of a soldier in this Military Department—whether in hospital or in the field—the Chaplain, wherever one is on duty, and in all other cases the Surgeon, is instructed, whenever practicable, to cause the *name, rank, company, regiment, age, date, and cause of death, last place of residence*, and any other items deemed of importance relating to the deceased, to be legibly written upon white paper, with ink, and to place this record in a bottle, to be well corked, and deposited in the coffin, at the foot of the body, before burial.

JOSIAH CURTIS,
Surgeon U.S.V., Act. Med. Director.

CIRCULAR LETTER.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., June 14, 1864.

The following
General of Pr
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from a circular, issued by the Commissary
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GENERAL OF PRISONERS,
20, 1864.

III.—The medical officer pro
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commanding officer, semi-monthly reports of deaths, giving names, rank, regiment, and company; date and place of capture; date and cause of death; place of interment, and No. of grave. Effects of deceased prisoners will be taken possession of by the commanding officer, the money and valuables to be reported to this Office (see note on blank reports), the clothing of any value to be given to such prisoners as require it. Money left by deceased prisoners, or accruing from the sale of their effects, will be placed to the Prison Fund.

The ration for issue to prisoners will be composed as follows:

Pork, or Bacon.....	10 oz. (in lieu of Fresh Beef)	
Fresh Beef.....	14 do.	
Flour, or Soft Bread.....	16 do.	
Hard Bread.....	14 do. (in lieu of Flour or Soft Bread.)	
Corn Meal.....	16 do. (in lieu of Flour or Bread.)	
Beans, or Peas.....	12½ lbs.	
Or Rice, or Hominy.....	8 do.	
Soap.....	4 do.	to 100 rations.
Vinegar.....	3 qts.	
Salt.....	3½ lbs.	
Potatoes.....	15 do.	

Sugar and Coffee, or Tea, will be issued only to the sick or wounded, on the recommendation of the Surgeon-in-charge, at the rate of twelve (12) pounds of sugar; five (5) pounds of ground or seven (7) pounds of green Coffee, or, one (1) pound of Tea, to the hundred rations. This part of the ration will be allowed only for every other day.

The difference between the ration as above established, and the ration allowed by law to soldiers of the U. S. Army, constitutes the "savings" from which is formed the "Prison Fund."

VIII.—The Prison Fund is a credit with the Subsistence Department, and, at the request of the Commissary General of Prisoners, may be transferred by the Commissary General of Subsistence in manner prescribed by existing Regulations for the transfer of Hospital Fund.

XVI.—When prisoners are seriously ill, their nearest relatives, being loyal, may be permitted to make them short visits; but under no other circumstance will visitors be admitted without the authority of the Commissary General of Prisoners. At those places where the guard is inside the inclosure, persons having official business to transact with the Commander or other officer will be admitted for such purposes, but will not be allowed to have any communication with prisoners.

By order of the Acting Surgeon-General:

C. H. CRANE,
Surgeon, U.S.A.

ARMY. ORDERS, CHANGES, &c. APPOINTMENTS.

Dr. George P. De Grassi, of New Jersey, to be Assistant-Surgeon of Volunteers, June 7, 1864.

Edward Voelker, Crane Brush, and Francis W. McEvoy, of New York; Edward Von Wyck, of Maryland; John Black and James Graham, of Pennsylvania; C. L. De Villeneuve, of New Hampshire; Gustavus Bubenzer and Henry Kruger, U.S.V., to be Hospital Stewards U.S.A.

RESIGNATIONS.

Surgeon F. G. Snelling, U.S.V., to take effect June 11, 1864.

DISCHARGES, DISMISSALS, ETC.

Surgeon Arad Parks, 83d Iowa Vols., honorably discharged, having tendered his resignation on account of physical disability.

Surgeon M. R. Gage, 25th Wisconsin Vols., honorably discharged for the same cause.

Assistant-Surgeon Walter B. Morrison, 3d Michigan Vols., honorably mustered out, having tendered his resignation on account of the expiration of the term of service of his regiment.

Hospital Steward Joseph Asudaie, U.S.A., dishonorably discharged for incompetency resulting from intemperate habits.

ORDERS.

The following named medical officers are re-

present stations, and will report in person

Surgeon-General R. C. Wood, U.S.A., at

H. Grove, N. F. Marsh, and John G. H.

Surgeon Ebenezer Swift, U.S.A., at

Department of the South, and will

as Medical Director of the North

Surgeon

at

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to Assistant

Surgeons J.

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General, De-

vetty, U.S.A.,

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General, De-

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General Hospi-

House, Va.

Hospitals, White

operative Scr-

gery, of hospitals and of transportation of sick and wounded of 2d Corps, Army of the Potomac.

Assistant-Surgeon J. S. Ely, U.S.V., to Hospitals of 6th Corps, White House, Va.

Assistant-Surgeon T. R. Pooley, U.S.V., to Depot Hospitals, White House, Va.

Acting Assistant-Surgeon J. H. Coover, U.S.A., to General Hospital, Annapolis, Md.

Acting Assistant-Surgeon J. J. Cockrill, U.S.A., to General Hospital, Patterson Park, Baltimore, Md.

Surgeon G. S. Palmer, U.S.V., as Surgeon-in-charge, Division No. 2, General Hospital, Annapolis, Md.

Medical Cadet R. Lautenbach, U.S.A., to General Hospital, Patterson Park, Baltimore, Md.

Assistant-Surgeon G. B. Parker, U.S.V., to Camp Parole Hospital, Annapolis, Md.

Surgeon G. M. Kellogg, U.S.V., as Medical Director General Crooks' command, Department of West Virginia.

Surgeon W. D. Stewart, U.S.V., as Medical Director, General Sigel's command, Department of West Virginia.

Surgeon W. H. Gobrecht, U.S.V., as Surgeon-in-charge, Officers' Hospital, Fairmount, near Cincinnati, O.

Assistant-Surgeon W. W. Wythes, U.S.V., as Executive Officer, Asylum Hospital, Knoxville, Tenn.

Surgeon A. L. Cox, U.S.V., as Surgeon-in-charge, General Field Hospital, Kingston, Ga.

Assistant-Surgeon M. C. Woodworth, U.S.V., as Surgeon-in-charge, General Field Hospital, Resaca, Ga.

Surgeon George F. Freuch, U.S.V., to duty establishing General Hospitals, Rome, Ga.

Surgeon S. E. Fuller, U.S.V., as Surgeon-in-charge, General Hospital No. 14, Nashville, Tenn.

Surgeon R. D. Lynde, U.S.V., as Surgeon-in-Chief, 3d Division, 4th Corps, Army of the Cumberland.

Surgeon Adam Hammer, U.S.V., as Surgeon-in-charge, Marine Hospital, St. Louis, Mo.

Assistant-Surgeon J. A. White, U.S.V., to Camp Distribution, New Orleans, La.

Assistant-Surgeon J. W. Applegate, U.S.V., as Surgeon-in-charge, General Hospital No. 4, Beaufort, S. C.

Assistant-Surgeon H. M. Kirke, U.S.V., as Surgeon-in-charge, General Hospital No. 6, Beaufort, S. C.

Assistant-Surgeon E. D. Buckman, U.S.V., as Surgeon-in-charge, General Hospital No. 5, Beaufort, S. C.

Assistant-Surgeon J. F. Huber, U.S.V., as Surgeon-in-charge, General Hospital No. 3, Beaufort, S. C.

Surgeon Alfred Wynkoop, U.S.V., as Health Officer, Hilton Head, S. C.

MISCELLANEOUS.

So much of Special Orders No. 142, current series, from the War Department, as dismissed Assistant-Surgeon James Filston, 143d Pennsylvania Vols., is revoked, and he is honorably discharged.

Camp Fry, Augusta, Me., and the Barracks at Albany, N. Y., have been turned over to the Medical Department for hospital purposes.

The Treasury Department has decided that the law increasing the pay of Cadets at the Military Academy, West Point, N. Y., does not increase the pay of Medical Cadets of the U. S. Army.

The War Department has decided that under the law of April 9, 1864, Chaplains cannot receive commutation of fuel and quarters.

The Barracks at Keaville, Mass., have been turned over to the Medical Department for hospital purposes.

Plans and estimates are being prepared for the erection of an Eye and Ear Infirmary at Chicago for the use of the United States Army Medical Department.

Since the commencement of General Grant's campaign 1,000 Surgeons and Nurses have been sent to the Army of the Potomac, of whom 194 were private physicians of the Volunteer Aid Corps, 42 Contract or Acting Assistant-Surgeons, 9 Regular Surgeons, and 775 Nurses.

By direction of the President, the appointment of Gustavus A. Bingel as Assistant-Surgeon U.S.V., is revoked, he having declined to accept his commission as such on account of physical disability.

The barracks at Camp Parole, Annapolis, Md., will be turned over to the Medical Department for temporary occupation by slightly wounded officers and enlisted men. Colonel A. R. Root, 94th New York Vols., will continue in command, and organize the troops arriving in such a manner that military discipline, correctness of records, and prompt return to duty can be secured.

To complete his record Charles Brackett is mustered into service as Assistant-Surgeon 9th Illinois Cavalry, to date February 1, 1862.

A Board to consist of the following named officers will assemble in Washington, D.C., on the 15th day of June, 1864, to examine into and report upon Professor E. N. Horsford's investigations relative to the Army Marching Ration:—

Colonel Charles Thomas, Assistant Quartermaster-General; J. M. Cuyler, Medical Inspector U.S.A.; A. C. Hamlin, Medical Inspector U.S.A.; M. D. L. Simpson, Assistant Com. Gen. Snhs. U.S.A.; George Bell, Com. Subs. U.S.A.; Captain G. A. Pierce, Assistant-Quartermaster U. S. Vols. The junior member will act as Recorder.

Hospital Steward O. P. Wharton, U.S.A., has been reduced to th ranks for drunkenness, and will be sent under guard to Newport Barracks, Ky., and delivered to the superintendent Regimental Recruiting Service, 18th U.S.I., for assignment to that regiment.

A Board, to consist of Surgeon Charles McDougall, U.S.A., Surgeon-General W. J. Dale, of Massachusetts; Captain E. E. Camp, Assistant-Quartermaster U.S.A., will meet at Worcester, Mass., on the 22d of June, 1864, to procure a lease of the site and buildings, and prepare plans and estimates of all necessary additions and alterations for the conversion of the Eclectic College at that place into a General Hospital of one thousand beds.

So much of General Orders No. 211, series of 1862, from the War Department, as dismissed Surgeon Ferris Jacobs, U.S.V., has been revoked, and his resignation accepted from December 22, 1862.

Surgeon N. R. Derby, U.S.V., is sick at Jefferson Hospital, Jeffersonville, Ind.

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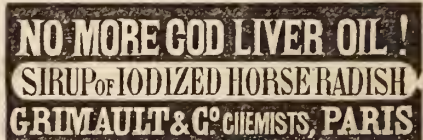
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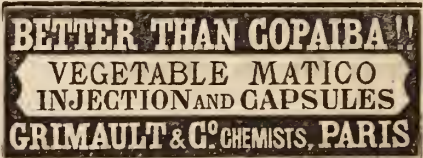
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Original Lectures.

LECTURES ON GUNSHOT INJURIES OF THE ABDOMEN.

By FRANK H. HAMILTON, M.D.,

PROF. OF MILITARY SURGERY AND FRACTURES AT BELLEVUE HOSP. MED. COLLEGE, AND LONG ISLAND COLLEGE HOSPITAL; SURGEON TO BELLEVUE HOSPITAL; LATE MEDICAL INSPECTOR, U.S.A.

LECTURE VI.—PART V.

Gunshot Wounds of the Stomach.

THAT a ball has entered this viscus may be inferred from the following circumstances—namely, the situation of the external wounds; the direction which the projectile has taken, as indicated by various evidences; the præcordial pain; excessive prostration; hiccough; nausea and vomiting. But no positive evidence can be afforded except by the vomiting of blood and the escape of the contents of the stomach through the wounds.

The fatality of these accidents is even much greater than that of similar wounds of the intestines. Probably not one in fifty recovers; perhaps not one in a hundred.

This greater fatality is due mainly to the fact that the parallelism between the wound in the parietes of the abdomen and the wound in the stomach is more difficult to maintain, and extravasations of the contents of the stomach occur therefore more speedily and certainly, and to a greater extent. The violent contraction of this viscus, also, in the act of vomiting, can scarcely fail to force out a large portion of its contents into the cavity of the peritoneum.

In some measure the peculiar fatality of these accidents may be traced to hæmorrhages from some of the numerous and large bloodvessels with which the stomach is supplied.

The records of military and of civil surgery are, however, not without examples of complete recovery after gunshot and other penetrating wounds of the stomach.

The case of Alexis San Martin is familiar to most American readers as being the person upon whom Dr. Beaumont, of the U.S.A., and Prof. Robley Dunglison, of Philadelphia, made their interesting experiments to determine the action of the gastric secretions. It promises, however, sufficient interest in a surgical point of view, to warrant its reproduction on the present occasion. An account of the case was originally published in the *Philadelphia Medical Recorder* for Jan., 1825, but as the account is not before me, I shall quote from Prof. Dunglison's history, given in his *Elements of Hygiene*:—

In the year 1822 a Canadian lad, Alexis San Martin, 18 years of age, received a charge of buckshot in his left side, when not more than one yard from the muzzle of a musket, which carried away the integuments and muscles to the size of a man's hand, fracturing and entirely blowing off the anterior half of the sixth rib, fracturing the fifth, lacerating the lower portion of the left lobe of the lungs and the diaphragm, and perforating the stomach; the contents of the musket, with fragments of clothing and pieces of the fractured ribs, being driven into the muscles and into the cavity of the chest.

When Dr. Beaumont saw the lad, twenty-five or thirty minutes after the accident, he found a portion of the lung, as large as a turkey's egg, protruding through the external wound, lacerated and burnt; and immediately below this another protrusion, which, on inspection, proved to be a portion of the stomach, lacerated through all its coats and suffering the food he had taken at breakfast to escape through an aperture large enough to admit the forefinger.

We are not informed that any sutures were employed, the treatment throughout being mainly therapeutical, with simple local applications and the occasional use of the knife in opening abscesses. Numerous complications en-

sued in the course of the cicatrization of this extensive wound. Abscesses formed, from which the various foreign matters were slowly thrown out, portions of the ribs exfoliated, and the patient became worn down by long continued suppuration and febrile disturbance.

Finally, however, at the expiration of a year from the time of the accident, the wounds had all cicatrized with the exception of that in the stomach, which continued in much the same condition as it was six weeks after the receipt of the injury, the aperture being about the size of an American twelve cent piece, through which the food and drinks were constantly exuding unless prevented by a plug, compress, or bandage.

In 1833, when Dr. Dunglison made this report of his case, he was still in perfect health, feeling no inconvenience from the wound except the trouble of dressing it. He ate as heartily, and his digestion was as perfect as before the injury; he could perform any kind of labor, such as chopping wood or mowing in the field. After drinking a quart of water or of soup, by removing the compress, he could throw it out through the wound. On removing the dressings the stomach was frequently found protruding, presenting itself in the shape and of about the size of a half-blown damask rose, yet he complained of no pain, and it would return of itself, or it was easily reduced by gentle pressure.

This patient survived the injury many years longer, but I am not informed as to the precise period of his death or of its cause.

DeWitt C. Peters, Asst. Surg. U.S.A., has reported the case of George H. Bowes, of the 8th Ill. Cavalry, who was wounded near South Mountain, Md., on the 13th of Sept., 1862, by a pistol ball, in a hand-to-hand encounter with the enemy. The ball entered the abdomen above the umbilicus, and passing upwards and backwards, emerged on the back below the tenth rib. He immediately began to vomit blood, and this continued at intervals for seven days. He also passed blood with his stools. For a period of two months chyme escaped through the wound after having either eaten or drunk. He became much emaciated, but the wounds finally closed, and his health is now reëstablished; but owing to contractions formed in the healing of the track of the wound, he is bent forward, and cannot by any force straighten himself. The treatment consisted in the employment of general therapeutic remedies.

Dr. Peters relates, in the same paper, a case of punctured wound of the stomach which came under his notice in New Mexico; the wound having been inflicted by a cheese knife. In this case, also, the man recovered in a short time, without surgical interference.—(AMERICAN MED. TIMES, April 4, 1863, p. 160.)

It will be observed that in these few examples which I have noticed, the recovery took place without surgical interference. But I have thus far in my reading failed to find an example of gunshot wound of the stomach in which the patient has recovered after the wound in this viscus had been closed by sutures. Of course I cannot say that such cases have not occurred, and that they have not been properly reported; yet I suspect they will be found at least to be less numerous than those in which a recovery has taken place without such interference. The advocates of the suture may very properly reply to this statement, that the infrequency of examples illustrating the value of their practice will be sufficiently explained by the infrequency of the experiment; but then if the practice does not rest upon the results of actual experiments, if these gentlemen have only propounded to us certain theories, we are at full liberty to discuss their value. This I consider that I have already done in my remarks on similar wounds of the intestines. There is no reason why these arguments, if they possess any value at all, do not apply equally in the present case. In short, I must again differ from M. Legouest, who declares that in a case of gunshot wound, "when the perforation of the stomach gives rise to an extravasation of its contents, it will be proper to enlarge the wound in the abdominal parietes, remove the

extravasation from the peritoneum, and, after having revived the edges, reunite the solution of continuity in the organ by the suture rather than abandon the patient to an eventuality almost always fatal." The theory has nothing in it to commend it to my judgment; and no testimony of facts has been presented to me to alter these convictions.

The same absolute quietude must be enjoined as in a case of wounded intestine. No food or drinks should be taken into the stomach for at least twenty-four hours, except, perhaps, a small piece of ice from time to time, which may be allowed to dissolve slowly in the mouth and to pass down into the stomach, for the double purpose of checking the hæmorrhage and arresting the vomiting. As medicine, one grain of solid opium or one quarter of a grain of morphine may be given at such intervals as the symptoms may demand. Warm fomentations, and in some cases perhaps leeches or the lancet, will fulfil all the remaining therapeutical indications.

Original Communications.

DIFFICULT OBSTETRICAL CASES.

By GEO. T. ELLIOT, JUN., M.D.,

PROFESSOR OF OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN IN THE BELLEVUE HOSPITAL MEDICAL COLLEGE; OBSTETRIC PHYSICIAN TO BELLEVUE HOSPITAL AND THE LYING-IN ASYLUM.

(Continued from page 197, vol. viii.)

CASE CVIII.—*Retroversion of Impregnated Uterus—Great Accumulation of Urine—Successful Reposition and Recovery—Dr. Mola, House Physician.*

ISABELLA ARMSTRONG, aged 25, was admitted into Bellevue Hospital on the 27th of October, 1863. She was a healthy woman, and stated that her health had always been good. Has had two children, both now living and in good health. After the second confinement she suffered from falling of the womb, which came down near the vulva, but was never treated for this trouble. Four months ago her menses stopped. She suffered from morning sickness and the other evidences of pregnancy as in her previous gestations, and now has milk in the right breast. On the 15th of October she went to a funeral, and on getting out of the carriage slipped and struck her abdomen against a gravestone. She was much prostrated by the shock, and had to be assisted home in the carriage by a friend. She has since been confined for most of the time to the recumbent posture before entering the hospital. I saw her in the afternoon of the 28th, and recognised a large tumor in the recto-vaginal cul-de-sac; the os uteri could be reached with difficulty through the vagina, narrowed by the projection forwards of the posterior vaginal wall, but could be recognised on the level with the upper part of the symphysis pubis. The patient had walked the whole length of the ward to the examining bed; she presented no symptoms calling for immediate relief; she had no evidences of inflammatory action. Pregnancy was evident from her history and symptoms, though neither foetal heart nor foetal movements were recognisable. Some cathartic medicine, which had been given on the previous evening by Dr. Mola, had not operated, and I ordered castor-oil to be given, preparatory to a thorough examination on the morrow.

Oct. 29th.—Bowels have been freely moved. Her condition as before. She again walked across the ward to the examining bed. But now, before proceeding to the thorough examination of the case, I inquired about the bladder, when she declared that she had not passed water for a week, though, she stated, some had dribbled away at times when she walked. This was the first allusion made by her to the state of her bladder. A catheter was then introduced and one hundred and forty-four ounces of urine were drawn off in the presence of my colleague, Prof. Barker, and other gentlemen. This urine was of natural color, good specific gravity, of healthy odor

and reaction, and free from albumen. The abdomen diminished in size, and the diagnosis of a retroverted pregnant uterus could be clearly made out.

She was then brought at once under the influence of chloroform by one of the house physicians, while another, standing on the bed, raised her hips high in the air so that the abdomen looked downwards towards the bed. I then introduced the fingers of the right hand in the vagina, and pressing the fundus of the uterus through the posterior vaginal wall, succeeded in an instant in passing it along the curve of the sacrum and leaving it well anteverted. In so doing I distinctly felt the ballottement of the fœtus.

After the effects of the chloroform had passed, she said that she felt perfectly well and comfortable. All traces of the tumor, which had so greatly distended the posterior cul-de-sac, and which had been so readily grasped between the fingers of one hand in the vagina and one in the vulva, had disappeared, while an ample vagina and pelvis could be recognised.

The urine drawn from this patient, and the patient, were shown at my clinical lecture. She never had an unfavorable symptom afterwards. She never once needed the introduction of a catheter, or showed any further tendency to uterine displacement or hæmorrhage; and after ten days of close observation she left the hospital somewhat wearied with what she had considered to be unnecessary care.

In the AMERICAN MEDICAL TIMES, May 4th, 1861, p. 289, Case LXII., is the history of a case of a unilocular ovarian cyst under my care, which is interesting in the differential diagnosis of such cases, as the position of the os uteri was exactly similar.

CASE CIX.—*Perforation in a Case of Contracted Antero-Posterior Diameter of Brim—Mother did well.—Dr. Mola, House Physician.*

Ann Royal, aged 22, primipara, strong, well developed, healthy looking girl of medium size, entered the lying-in ward at Bellevue at 7 P.M., Nov. 12, 1863. Os uteri noted by Dr. Mola as about as large as a ten-cent piece, and not dilatable; pains not strong; head presenting; heart sounds over left iliac region; uterine souffle also distinguishable. 13th, 8 A.M.—Has not slept much last night. Os still rigid; dilated to the size of a half dollar; membranes unruptured and protruding. Head presenting; foetal heart the same. 2.30 P.M.—Pains a little stronger. Waters have broken; presentation recognised, the posterior fontanelle being to the left acetabulum, and just dipping within the brim. Foetal heart as before. 6 P.M.—Head has not advanced. Os not fully dilated, and somewhat rigid. Pains feeble and constant. The examining hand is covered with a greenish, slimy material. Impossible for any one to recognise the foetal heart.

I was then sent for and arrived at 11.30 P.M., when the patient had been brought under chloroform. I made an examination, and found the os uteri, presentation, and position of the head as noted at 6 P.M.; while, by passing the hand well up, the cause of delay could be recognised in an undersized antero-posterior diameter of the brim, and the left parietal bone was pressed against and driven in by the promontory at a point between the sagittal suture and the boss. Foetal heart inaudible. The situation left no doubt in my mind that the child was dead, and had probably died from injury to the cerebral circulation; and it seemed that forceps were inadmissible under the circumstances (especially so when the risks of puerperal fever incident to the season were considered), although the degree of deformity did not forbid the trial of a slender pair. Accordingly Dr. Rowe kept up the chloroform and I introduced Blot's perforator near the posterior superior angle of the right parietal bone, and completely broke up the brain. Churchill's erotchet being then introduced, the head was gradually and readily drawn into the world, the placenta following almost immediately. Half an hour afterwards Dr. Mola discovered that the uterus—which had been kept pressed down by the nurse—was rather large, and that blood was oozing from the vulva. Accordingly he introduced his hand, turned out

some clots, and gave ergot, and in two hours left the patient sleeping comfortably. Dec. 2, 1863.—With the exception of a slight febrile movement on the second day after the operation, there has been nothing worthy of record. The patient will soon be able to leave the hospital.

Child weighed eight pounds in its mutilated state.

CASE CX.—*Retroversion of Impregnated Uterus—Death—No Autopsy.*

Dr. Young asked me to visit Mrs. — on the 14th of Aug., 1862, who had come to the city about two days before suffering from dysuria, from which she had been complaining about two weeks. She had been treated in a neighboring city, and had once had her urine drawn with a catheter, though no thorough vaginal exploration seemed to have been made. On the morning in which I saw her Dr. Young had seen her and found her in an unconscious state, and evidently in an alarming condition. He had drawn off two-thirds of a large chamber-potful of clear urine with a catheter, and had recognised a retroverted uterus. He had been obliged to give chloroform to introduce the catheter. I found her unconscious, with a very bad facies, eyes like those of the dying, and recognising nothing; slight froth on the lips; pulse very rapid and feeble; skin neither cold nor warm; not perspiring; respiration hurried. She tossed, moaned, threw herself on her elbows and knees; frequently rolled in a rapid manner to the edge of the bed, as though desirous of throwing herself on the floor, and necessitating the constant presence of some one to restrain her. No paralysis; no special tendency to roll in the same direction. Unconscious, evidently, but not raving. On examination I found the uterus entirely retroverted, the os on a level with the upper rim of the symphysis, the fundus down to the sacro-coccygeal articulation. Os sufficiently open to admit the finger. The uterus seemed about three months impregnated. To effect the reduction, we put her on her hands and knees, holding up the hips, as it was necessary to give an anæsthetic (chloroform used) to quiet her. Pressure on the posterior vaginal wall caused half a tumblerful of bloody and very offensive urine to come away. Continuing the manœuvre, I was enabled to push up the fundus uteri; and then, by introducing two fingers within the rectum, to continue pushing it up until it cleared the promontory. But the abdominal straining would force it down again. The vagina was short and the cul-de-sac very deep. Satisfied that the uterus could not then be permanently replaced, I desisted. Not altogether liking the respiration, we gave a prompt trial of Hall's method, and she soon breathed as before. Consciousness as before. Without an anæsthetic no satisfactory uterine manipulations could have been made. Believing that the case must terminate fatally, and as she would scarcely swallow, we agreed that the colpeurynter should be used to cushion and replace the uterus, that the bladder should be kept emptied, and that she should be nourished by enemata.

In five hours we met again. She was quieter and sitting up, but if possible looked worse. Bladder nearly to the umbilicus. Half a chamber-potful of bloody and very offensive urine drawn. Advised recumbent posture. - 15th. Continues to sink. Renal secretion copious and drawn with catheter. Some sent to Dr. Draper for examination did not reach him. The uterus has never fallen back as low as it was, and is movable. Sank steadily, and died during the night. No autopsy permitted.

CASE CXI.—*Apoplexy in a Neonatus—Cause Undetermined.—Dr. Mola, House Physician.*

John Monaghan was born in the lying-in wards of Bellevue on the 12th Nov., 1863, after a perfectly natural and comparatively easy labor. He weighed ten pounds, was well developed, and presented all the appearances of perfect health. Twelve hours after his birth Dr. Mola's attention was called to the child, who cried a great deal and would not nurse. There were no evidences of anything wrong about him, but by the next morning he had died.

Autopsy, twenty-four hours afterwards.—Scalp showed

the customary congestion. On removing the calvarium and dura mater a large quantity of extravasated blood was found diffused over the whole surface of the brain. This organ was congested, but presented no other extravasations. Lungs, heart, and other organs perfectly healthy.

CASE CXII.—*Case of Twins in a Pelvis with conjugate Diameter of Three Inches and a Half—Risk of Locking of the Heads prevented by Manipulation.—Dr. Francis Delafield, House Physician, Reporter.*

Mary Hoey, aged 24, unmarried, primipara, fell in labor in the lying-in wards of Bellevue, Oct. 14th, 1863, 6 A.M. Patient first seen Oct. 14th, 7 P.M. At that time the os uteri was soft and dilated; membranes not ruptured; no presenting part within reach. Uterine tumor large and projecting forwards. Contractions feeble. 9.15 P.M., Dr. Elliot saw the case. Membranes not yet ruptured, but very tense, thin, and protruding through the os. No presenting part to be reached (tension of membranes preventing). The sacral promontory is felt projecting, leaving an antero-posterior diameter of about three and a half inches. The abdomen presents a large projecting tumor, with a sulcus apparent to the right of the median line. One foetal heart can be heard about four inches below the umbilicus and a little to the left of the median line. Dr. Elliot stated his belief that the case was one of twins superimposed. The membranes then ruptured spontaneously, when two heads could be felt presenting. One to the left and superiorly, with its membranes still unruptured; the other (of which the membranes had ruptured) to the right and beneath. The lower seemed likely to advance first and catch beneath the upper. Dr. Elliot feared the risk of locking and rupturing the membranes of the upper child; he placed his hand on the abdominal wall over the head, which was superior and to the left, and forced it into the pelvis in advance of the other head. The contractions now became more powerful, and continued until 2 A.M., when the head which had been pressed down was first delivered, with the occiput under the pubes. In fifteen minutes the second child was born, full rotation not having taken place. At 2.30 A.M. the placentæ were born within a few minutes of each other. They were entirely distinct and each complete in itself. 1st child, female, 4 lbs. 4 oz.; 2d, male, 4 lbs. 8 oz. Both living. Measurement made with the finger after delivery.

CASE CXIII.—*Forehead Presentation converted by Conjoined Manipulation into that of the Vertex—Death of Child, and Autopsy—Mother did well.—Dr. Francis Delafield, House Physician, Reporter.*

Mary Madden, aged 28, married, primipara. Labor commenced in the lying-in wards of Bellevue, Oct. 23d, 1863, 9 P.M. Membranes ruptured 1 P.M. Oct. 24th, at 3 P.M., Dr. Elliot saw the case and recognised a forehead presentation, the chin pointing towards the left sacro-iliac synchondrosis. The os uteri was soft and well dilated; the child's head had just engaged in the superior strait. The uterine contractions were feeble, and the foetal heart distinctly audible. The patient was placed under the influence of chloroform. Dr. Elliot then introducing his right hand into the vagina, and with his left pushing down the occiput through the abdominal wall, succeeded in flexing the head and converting the presentation into a right occipito-transverse position. After the operation the foetal heart could be distinctly heard in the right iliac region. At 5.15 P.M. the head was in the same position, partially engaged in the superior strait, and a little more flexed. At 7.20 P.M. the head was fairly engaged in the superior strait, strongly flexed, and the occiput had commenced to rotate towards the symphysis pubis. The uterine contractions were now of considerable force, and at 9 P.M. the occiput had completely rotated under the symphysis, and the child was born. There was a slight delay between the birth of the head and that of the shoulders. The child respired a few times, and the heart continued to beat for three quarters of an hour, at the end of which time the child was dead. All the usual methods for restoring animation, hot and cold water, artificial respiration, etc., were continued until death without

effect. The placenta came away at 10 P.M. Child, female; weight, 7 lb. 11 oz.

Autopsy—Seventeen hours after death.—Weather cold. Cause of death not evident, though every organ of the body was examined with care. There was some congestion of the brain and liver, but not such as could be pronounced a cause of death. No extravasation. Lungs partially inflated and presenting neither ecchymoses, nor liquor amnii, nor evidences of ante-partum respiration. Heart and vessels normal. Peritoneum healthy. It was interesting to observe on the posterior wall of the uterus the evidences of congestion of vessels parallel to each other and running downwards obliquely on either side from a line drawn longitudinally, as it were, along the raphe of the uterus. The broad ligaments were also congested, and the fundus of the uterus, instead of being flat, was markedly convex.

Doubtless the death of the child may have been occasioned by pressure on the cord during the interval of time between the birth of the head and the shoulders, mentioned by Dr. Delafield. Still there were no satisfactory pathological evidences of such a mode of death. I confess to an inability to distinguish in these neonati such congestion of the brain as may be recognised as a cause of death, unless some extravasation can also be found. I did anticipate that the manipulation described might have induced such premature respiratory efforts as are now so well known to be a cause of foetal death; but a careful examination proved the contrary.

Certainly, in my experience, these forehead presentations have proved most fatal to foetal life, unless the child were quite small; and notwithstanding the unfortunate result of the case, I feel greatly encouraged by the success of the manipulation to try it again under similar circumstances with renewed hope.

Whether this case had passed on with the forehead as the presenting part, or had even become converted into a face presentation, in either event, with the chin to the left sacro-iliac synchondrosis in a primipara of 28, the prospects were far from satisfactory.

REMARKS ON

THE SOCIAL AND SANITARY CONDITION OF THE ONONDAGA INDIANS.

By JONATHAN KNEELAND M.D.,

OF SOUTH ONONDAGA, N. Y.

THE Onondaga tribe of Indians occupies a reservation lying on the Onondaga Creek and on a high ridge adjacent. This tract, secured to them by Treaty with both the National and State Governments, contains about 5000 acres of good land. The valley, in which they nearly all reside, runs north and south, is about 800 feet above tide-water, eight to twelve miles south from the city of Syracuse, and the soil is in the green shale and slate formation which underlie the Onondaga lime-group of rocks. Their reservation extends east, embracing a hill which rises some 1700 feet above tide-water, and reaches from the Onondaga water lime-group, and grey and blue Onondaga limestones which form its base, to the Tully limestone (of the State survey) which crowns its summit, embracing the entire formation called the Hamilton slates, which lie between the Onondaga and Tully limestones. This locality has been the home of the Onondagas since the earliest records, and tradition makes it the centre or rallying point for Indian councils ever since the Aboriginal Confederation, known as the Iroquois or Six Nations, was formed some four hundred years ago.

This tribe, which, in the time of the American revolution, could raise and that have numbered 3,000 or 4,000 warriors in all, is now reduced to about 300 souls. The Chiefs, who seem reluctant to acknowledge their decadence, say, "Some Onondagas gone to live with the Mohawks in Canada; many more are with western Indians at Green Bay

and farther west; and some gone to your big war;* come back no more."

All these allowances being made, there are not as many hundred Onondagas on the face of the earth now as there were thousands ninety years ago. I propose to glance briefly at the physical and pathological causes of their decline, and, it may as well be said, OF THEIR FINAL EXTINCTION.†

It is said small-pox was unknown among them previous to the settlement of this country by the whites; and it is gravely asserted by one of the Puritan chroniclers of the early settlement of New England, "that an epidemic of small-pox broke out, and spread throughout all the tribes on the Atlantic coast, and far inland, just prior to the landing of the Mayflower." He says further, "This seems to have been sent by God to thin out these barbarians and weaken them to make way for us." He admits, however, that the disease, before unknown, was communicated by a ship's crew which landed on the New England coast to trade with the natives three or four years prior to the first settlement of Plymouth. This disease has, within thirty years, prevailed among the Onondagas at three different periods, and caused many deaths. Vaccination has not been introduced, except to a small extent, and that within the last six years; they are the most difficult people on earth to be led into measures of a prophylactic nature, and never can be induced to have their children vaccinated except when imperilled by exposure or contiguous prevalence of small-pox. It has been said that small-pox has decimated this tribe within thirty years, and if we count those who have died with the immediate attack or remote consequences, I believe it. Syphilis assumes worse forms here than among the whites of our inland towns and cities, and deaths occur every year from some of the protean forms of this malady. Its ravages as a congenital disease are great among the Indian children. Abortion is seldom purposely caused by medication or instruments among the squaws, who all desire to be mothers *early*, mothers *often*, and mothers *LATE*; which may be, in part, from mercenary motives, as each child draws an annuity of five dollars cash, and blankets worth as much more, from the National Government at Washington. The pride of maternity and the fondness for children and pets, is intensely strong among them; the ratio of those who die in infancy is, however, very large; many fall victims during the first year of life to syphilitic anæmia, attended in some cases with secondary eruptions and ulceration. Scrofulous diseases are very common among the children and youth, and oftenest seen in the glandular system, and next in affections of the bones and joints. The percentage of deaths from pulmonary tuberculosis is very large. During the ten years of my acquaintance with the tribe, many young men and young women, from the ages of fifteen to twenty, have died of consumption within a few months after marrying, which they are sure to do, in fact or in form, as soon as the development of the procreative organs will warrant.

A fact growing out of these early marriages, or conceptions from commerce of immature parents, is, that the children of these young parents are seldom reared, but die

* About twenty-five Indians of this tribe have been induced by bounties, whiskey, and martial music, of all of which they are very fond, to enlist in some one of the many regiments of volunteers raised since the outbreak of the great rebellion, in Onondaga, Cayuga, Madison, and Oneida Counties; and twice has the council of Assembled Chiefs deputed their best diplomats to visit Washington; and, by their personal importunity with the President and Secretary of War, these Indian soldiers have been released and returned home to their tribe, again to enlist, take larger bounties, and be again discharged by the power of Indian palaver with our good-natured (to Indians) Chief Magistrate; but one has been killed in battle, and none have died of wounds or disease to my knowledge.

† The inordinate use of tobacco, it being given to children as we give candy or sugar to quiet them and to hire older ones to do unpleasant duties, together with the general prevalence of the use of intoxicating beverages, are among the causes of physical degeneration; and their gross and irregular habits of eating, varying from surfeit to starvation, operate to hinder the proper nursing and care of their sick and feeble ones, if they do not really lower the powers of vital existence among the well. Within two years, five deaths have occurred in the tribe by lying out cold nights when drunk; three of the five, strong young men, found frozen in the morning; the other two men died in a day or two after lying out drunk.

of scrofulous or syphilitic maladies developed during the teething months; or, if they are carried through childhood, many of them are scarred, semi-idiotic, or crippled by these diseases, and will doubtless fall victims to their subsequent development at about the season of puberty or when growth ceases. The degeneration and inherited feebleness of constitution which have finally caused the native inhabitants of the Island of Malta and other secluded islands, and of certain mountain valleys in Europe, to run out, or, with but few exceptions, to only propagate dwarfs, cretins, and imbeciles, are in full operation in this tribe. Marrying in and in, or incestuous commerce, immaturity of parents, and the fact that scrofulous and syphilitic parents transmit to their offspring these diseases or their enfeebling consequences, are working out here the same results as elsewhere. The great laws of population are as imperative among the tribes of men as among the inferior animals, where we see weakly and infirm parents are forced to give place to the strong and healthy; and where whole species or families become unable to protect themselves from the war of the elements, or the encroachment of more vigorous and self-asserting families of the same species, they give place, and vigor triumphs over decay. It might seem exceptional in the case of Indians to the general law that "procreation between near relatives tends to impair and destroy the race," that the half-breeds, one of whose parents is part or all white, are generally short-lived, do not seem to be saved from decline by the infusion of white blood. Whatever may be the reason of this (perhaps depravity of taste is generally associated with syphilitic or other taint in the white parent), it is notorious that the children of both Indian parents, one of whom is from a distant tribe of Indians, are the most healthy, while half-breed white children and full-bred Onondagas are alike infirm or prone to yield to attacks of disease.

The state of medical knowledge among these Indians is briefly told:—They have but little knowledge of either remedies or diseases, and it is a marvel that any person should ever have sought to add to his popularity or that of his especial cure-all, by calling himself an Indian doctor, or his panacea an Indian remedy. *Podophyllum peltatum*, *macrotys racemosa*, *hamamelis virginica*, *apocynum cannabinum*, and *spigelia marylandica* are the chief remedies in use among them from the vegetable kingdom. Add to these a few showy, rare, inert plants, with Epsom salts and castor oil, and you have their stock of materia medica; and more than half of these remedies, probably all of them, have been taught them by their white neighbors.* They have a chief who glories also in the title of Indian doctor, and who circulates among some of the more ignorant whites in this and one or two adjacent counties, a few roots, leaves, and barks, given in decoction in large quantities of warm water, or infused in rum or whiskey; and boasts and pretensions, indicating his near relationship to Longfellow's "Jagoo the boaster," constitute his stock in practice. There are a few squaw doctors, who practise in substantially the same methods in the tribe, but none of these practise surgery, or even extract teeth or adjust broken bones or dislocations.

The absence of skill in surgery and midwifery among these Indian doctors is so well known in the tribe, that they have formerly, in bad cases, depended on nature, with what aid they might be able to obtain gratuitously from neighboring white physicians. About seven years ago, through the agency of some neighboring physicians and other benevolent persons who witnessed their destitution of medical skill or the means to secure it,† the Legislature was peti-

tioned, and a law was passed in 1858 giving them a physician's services in urgent need—his salary not to exceed \$300 annually, paid by the State. Since the passage of this statute I have been called three times to use the forceps in cases of midwifery, and have seen much of their bad surgery, or rather no surgery. I have never seen a one-legged or one-armed Indian among them; for many years no amputation has been performed on an Indian of this tribe. The reason given by their head chief, a most intelligent man, Harry Webster, was, "that Indians always die when you cut off their legs or arms," and indeed it seems well established that they have generally sunk after any grave operation. The trophies of conservative surgery, with the surgery left out, are numerous in the tribe in the shape of distorted and deformed limbs; legs and arms are seen ankylosed at almost every conceivable angle. Some of these might have been saved from deformity by judicious mechanical appliances, instead of which they apply hot fomentations of macerated barks and pounded roots, never having learned to combat inflammation of the joints by cooling applications or leeches, or to obviate the distortions and contractions which follow these inflammations by mechanical means.

One case of midwifery, in which resort to the forceps became necessary, amused me, and may serve to illustrate the stoicism and queer humor of this most grave-looking race:—The squaw had been in labor with her first child over thirty hours; all the obstetric skill of the tribe had been in attendance upon her more than twenty hours. She seemed much fatigued. When I was called, I however soon succeeded in removing the impacted foetus with the forceps. After separating the child, which proved to be alive, and removing the placenta, I left the woman on some husks and quilts on the ground, in the centre of the cabin, while I washed my hands in the snow at the door; on returning to see whether my patient rallied well, I found the bed (such as it was, where she was left lying to rest, while I stepped to the door) was gone, and all the squaws, with the husband of the parturient woman, seated on a board or bench at the side furthest from the door, the squaws with the woollen blankets which they always wear drawn over their heads, all sitting in a row, and looking as much alike as the beans in a pod. My patient, one of the five, I could not at first recognise. Seeing my surprise, they all laughed heartily, when I knew my youngest mother by her teeth being younger and her laugh a shade quieter than that of her nurse and midwife attendants.

They said to me, "White woman no have baby to-night, and go to meeting to-morrow like Indian woman."

I acknowledged the truth of this, and believed the squaw mentioned in Irving's "Astoria" might really have given birth to a child in the afternoon, strapped the youngster to a board and mounted her pony, and travelled on with the moving cavalcade of Indians* the next morning. They

perized—so said, lawyers and auditing town and county boards; were not liable at common law; their property could not be levied on by execution; and they never had either money or other means ahead; consequently no debts were paid by them; their fertile lands are rented to whites, paid for in advance, and the money soon spent for gewgaws, travel, whiskey, and short-lived luxuries; they then live for months by a system of beggary, until they can again rent their lands or send out squaws with baskets, head-work, and begging papers. The doctors contiguous to the tribe had attended them almost wholly without compensation for many years, until they, in 1858, secured \$300 annually from the general fund, the Legislature justly regarding the care of the needy and indigent sick Indians as properly a duty owing by the State as the pay of teachers and support of Indian schools.

* The Onondagas retain the custom which was prevalent among the Indians at the first settlement of this country by the whites, of binding the papoose to a board, fashioned often with cunning workmanship, and over the upper end of which projects a strong bow to keep the blanket from the face, and also to serve as a handle to lift it to and from their shoulders when they travel; it was also used, as we learn by the old couplet, "Rock-a-baby on the tree top," etc., to suspend the child by to a limb or sapling bent down, which would give it a motion decidedly soothing when swayed by the wind. This way of rocking the baby is now sometimes used by Indian mothers here while they hoe or plant in warm weather. This binding the child firmly by cloths, its back to a board, must induce the form of the spine, and may serve to account for a straightness almost abnormal; hence the saying, "Straight as an Indian"; and does it not also secure the shape of the neck of the lemur, which makes all Indians point their toes straight forward, as much in as the heels, when they walk? Or is this direction of the foot in progression wholly inherited from parents of like formation and motion?

* There is among the Senecas an educated Indian Doctor named Wilson, who graduated at Geneva Medical College many years ago; he occasionally visits this tribe, and is a man of some talent and skill, but his usefulness among the Indians is limited, owing to his habits. Schools and Protestant Missions have only been established among the Onondagas some eighteen or twenty years; they are therefore less intelligent than the Oneidas, Senecas, and Tuscaroras, who have enjoyed these means of improvement much longer. It is so said by agents, teachers, and missionaries, that the Onondagas are duller scholars and more generally indolent and depraved than any of the above-named tribes.

† The Indians being by treaty a nation by themselves, could not be pau-

are the most utterly free from nervousness, hypochondria, and hysteria, of any people known to me. Anæsthetics would be of but little use for them, as they seldom give utterance to cries of pain—a sort of guttural sound or smothered groan being the only indication of the presence of severe parturient throes. I have, however, seen three cases of cataleptic unconsciousness in mothers, caused by grief on the loss of promising children. In one of these the mother had lost her husband and two children of cerebro-spinal meningitis, within a few days, the last dying while they were after me, they having before had no doctor but their own; the mother had begged for a “white doctor,” and on the child’s dying before my arrival, “she fainted.” I found her rigid and unconscious; her jaws set; pulse feeble and about 60 per minute; she did not recover so as to swallow in many hours; and died of dropsy, supervening upon pericarditis, in a few months after the death of her children.

All epidemics of scarlatina, small-pox, measles, brain fever, or cerebro-spinal meningitis, are more fatal with them than with any race of whites in this region of country. This may be in part due to the physical degeneration of the tribe, and in part to the want of proper nursing, food, and care when sick. It is probable that being able, as they now are, to secure the aid of a physician when an epidemic comes among them, they may by degrees place confidence in “white doctors,” and heed directions as to food and nursing, to which they now pay little regard, and that their final extinction may be delayed by the same agencies which have increased the average duration of human life among civilized nations, viz. knowledge of, and obedience to, the laws of life. Industry, economy of means and time, and reliance upon their own labors and their fertile acres for their support, should be taught them instead of having their teachers, preachers, books, stationery, and blankets, hired and bought by the State, the Church, and the general government; but ere these radical changes in their nature and habits are effected, the Onondagas will have passed away.

SOUTH ONONDAGA, May 31, 1864.

Reports of Hospitals.

U.S. GENERAL HOSPITAL, CHRISTIAN STREET, PHILADELPHIA.

REPORT ON REFLEX PARALYSIS,

By S. WEIR MITCHELL, M.D.; GEO. R. MOREHOUSE, M.D.; AND WM. W. KEEN, JR., M.D.

(Continued from page 805.)

CASE III.—WOUND OF RIGHT THIGH, WITH PROBABLE COM-MOTION OF RIGHT SCIATIC NERVE; PARTIAL PARALYSIS OF RIGHT LEG; REFLEX PARALYSIS OF RIGHT ARM; SPEEDY RECOVERY OF ARM; HISTORY UNFINISHED.

WILLIAM W. ARMLIN, æt. 23, born in New York, farmer; enlisted August, 1862, in company “D,” 134th New York Vols. Healthy before enlisting, and except a slight typhoid fever in the fall of 1862, healthy up to the date of the wound, July 1, 1863, at Gettysburg. While kneeling on the left knee, the right knee bent at a right angle, he was shot in the right thigh on a line with the internal condyle of the femur, ten inches above it and a little anterior to the artery. The ball passed upwards, backwards, and outwards, and emerged two inches below the tuber ischii and one and a quarter inches external to it, just above the fold of the nates. Dropping his musket he fell on his face, weak but not insensible; the right leg violently flexed for a moment. He felt very feeble, but especially so in the right arm, with which he vainly tried to aid himself. After a half hour the bleeding, which was not excessive, ceased, and he was able to stand on his left leg but not on the right leg, and had scarcely any use of the right arm, which, it should be noted, was in no way hurt when he fell. He

managed to bind up the wound with a water dressing; and occasionally renewing it, lay two days on the field. When hit he perceived no pain, but within an hour a burning attacked his instep and has never left it, remaining neither worse nor better. Sensation, he is sure, was unaltered, except on the sole; motion improved slowly, except in the flexors and extensors of the foot and toes. To his surprise; the feebleness of the right arm increased after he was put in bed, and indeed notably after the second day. Up to October 28 it improved slowly; but at this time he went home on furlough and began to use a crutch, which again so weakened the arm as to alarm him and deprive him, as at first had happened, of the power to feed himself. Rejecting a crutch on this side, he used a liniment on the arm, and it has now gained so much as to have about one-fourth the force of the left arm. It did not lose sensation at any time.

Present State, December 14, 1863.—General health good.

Nutrition.—Wounds healed. Leg below knee wasted, foot swollen, toes blue. Contraction of great toe in flexion. Measurements, 8½ inches above internal condyle; the thigh measures, right 16, left 17½ inches; middle calf, right, 11½; left, 13 inches.

Voluntary Motion.—He lifts the right thigh well, but complains of its weight. Knee motions very fair; has no extension or flexion of the foot or toes.

Sensation.—Tactility absent in sole of right foot; feeble in second toe on its dorsal face; absent on top of third toe; but elsewhere complete. Localization extremely confused, so that a touch on the toes is felt, but is referred to the instep. Surface analgesia of the sole, but deep pricking with a needle is felt in the sole. Hyperæsthesia of the posterior thigh muscles to a slight degree; marked soreness on pressure in the calf muscles, the short extensors of the foot and its whole dorsal surface, as well as the inside of the sole.

Pain.—The pain lies deep in the calf and extends outside, under and in the peroneal muscles, down the front of the leg, and over the dorsum of the foot, and to the external side. It is intense in the dorsum, but nearly absent in the sole. Water does not seem to ease the pain, which is of a burning character “like mustard.” Hitherto nothing has aided it.

Electric Test.—The thigh muscles respond well. The right tibialis anticus has no electro-muscular contractility, but its electro-sensibility is highly exalted, as is the case in all the muscles down to the foot. In the foot the electro-muscular contractility and sensibility are both lost, except that in some parts of the dorsum the sensibility cannot be tested readily for various reasons. It is certainly lessened. The right arm is still very feeble, especially below the elbow, and has lost in size. It measures comparatively as follows:

Dec. 20th.	RIGHT ARM.	LEFT ARM.
	Forearm, 8½ inches.	9½ inches.
	Arm, 9 “	9½ “

He is not left-handed. The arm is improving; the leg has remained unchanged during some time past.

Ordered.—First, a blister over the whole dorsum pedis. Dec. 23.—This has caused great relief, and is to be repeated. The complete history of this case will be detailed elsewhere. Up to this present date, February 1st, 1864, the burning pain in the foot has been relieved, and the hand and arm have entirely recovered under the use of the douche, active exercise, and electricity.

The following cases are equally instances of reflex paralysis. We regret that, owing to circumstances not under our control, they are less complete as to their symptoms and history than we should have desired.

CASE IV.—A sergeant was shot during the battle of Malvern Hill in the right testicle. This organ was nearly entirely destroyed by the ball. He fell without pain, believing himself wounded in the back. A few moments later he became senseless. Recovering after a few minutes he discovered that he could walk, but that the right foot

dragged when he attempted to lift it during the effort to get to the rear. This weakness remained permanent for several months, and was relieved by faradization and shampooing; soon after the testicle healed. The flexors of the foot on the left leg were completely paralysed to voluntary control, but responded to the irritation of the induced electromagnetic currents. There was no loss of sensibility.

CASE V.—The next case was observed by one of us in the U.S.A. General Hospital, 16th and Filbert streets. Unfortunately no notes were taken at the time, which will account for the brevity of the details.

An officer was struck by a small fragment of shell upon the external side of the left thigh. He felt pains of a smarting character in both thighs, at or about the same spot, and was impressed for a time with the conviction that he had been shot through both thighs. The shell wound healed in the course of three or four months. During this time he had occasional smarting on the outside of the sound thigh. This gradually disappeared, and at length he noticed accidentally that there was a space of skin about five inches square on the outer part of the sound thigh, in which there was neither sense of touch nor of pain. When examined by us he could indicate the boundaries of the anæsthetic space very readily by the loss of tactile sensations when a body, moved while in contact with his skin, was made to cross the line on to the numb parts. These bounds were always very accurately the same. He returned to his regiment without any improvement having taken place in regard to anæsthesia. It is difficult, as it appears to us, to refer either this case or the last to any cause except a reflex effect. The interest of the case just now recorded lies partly in the fact that, at the time of the wound, the patient felt a sensation which he referred to the part which afterwards became deprived of sensation.

The following case is a still more remarkable instance of the same peculiarity, and it is also instructive from its resemblance to Case No. 3, that of ARLIN, in whom a gunshot wound of the right leg also caused reflex paralysis of motion only in the arm of the same side:—

CASE VI.—GUNSHOT WOUND OF RIGHT THIGH; LESIONS OF MOTION AND SENSATION; REFLEX PARALYSIS OF RIGHT ARM AS TO MOTION.

DANIEL KENT, æt. 24, Pennsylvanian, farmer, enlisted August, 1862, company "B," 145th Pennsylvania Volunteers. Healthy until wounded. At Gettysburg, July 2d, 1863, while charging at a full run, the leg raised up, he was shot in the right thigh, 10½ inches above the edge of the patella, directly over the rectus. The ball made its exit on the postero-internal surface of the thigh, one inch below the fold of the nates. It seems to have passed inside of the bone and could not have hit the sciatic nerve. He fell at once, quite conscious, and feeling an instant stinging pain all over the right side of his body, and especially in the arm. He lost a great deal of blood, and found that he could not sit up without giddiness. His wound was dressed in six hours, and he was on the field thirty-six hours. The leg lost all motion and some sensation, and the tingling pain in the arm left him within twelve hours. He remained in bed six weeks, and then was able to walk on crutches. The sense of touch changed but little during the time which has since elapsed, and the power of movement in the leg has remained unaltered since August 1, 1863. The wound healed in October, with some previous loss of bone. Since October the wounds have twice reopened to give exit to small pieces of bone. Except an attack of ague in October, his general health has been good.

Present Condition, Dec. 26th, 1863.—*Nutrition.*—The leg is healthy in color; the foot swells when hanging down. The right thigh, eight inches above the patella, measures 19 inches in circumference; the left measures 19½ inches. The right calf measures 14½ inches; the left calf measures 15 inches. *Sensation.*—No pain anywhere; tactile sensibility entire; sense of locality healthy. *Motion.*—The thigh is voluntarily flexed very slightly, and only through

the agency of the psoas muscle, the anterior thigh muscles refusing to obey the will; abduction and adduction of the thigh normal; extension of the thigh is normal; extension of leg none. The foot is almost immovable, except that the will can cause feeble flexion of the toes, and slight eversion and inversion of the foot.

Electric Examination.—The rectus muscle has its electro-muscular contractility somewhat lessened; that of the two vasti muscles is lost until the wet conductors reach the upper parts of the muscles (three inches above the wound), where this property becomes normal. The sartorius has its electric contractility diminished. Below the knee the peroneus longus responds very well, but with this exception none of the leg muscles stir under the most powerful induced currents. The short extensor of the toes and the interossei still possess some power to contract under electrical stimulus. Throughout, the electro-muscular sensibility is diminished in all the muscles which have suffered in their contractile power, and the sense of pain seems also to be materially lessened since dry electric conductors, with strong currents, cause no pain when applied to the bones or nails of the foot. The history of the arm, which was reflectively paralysed, has been reserved for separate detail here. After three days from the date of the wound, the right arm, which had remained feeble, became so completely paralysed that the patient could no longer raise it to his lips; under the use of a stimulating liniment it grew better until he used crutches. Probably owing to their employment he became much worse, but gradually improved again up to this present date of January 6, 1864. The right and left arms measure nearly the same; power of right arm one-fourth that of left.

Electric Examination.—Electro-muscular contractility normal; electro-muscular sensibility somewhat lessened.

Treatment.—Faradization of arm daily; alternate hot and cold douche, and active motion. On close examination, soon after admission, some evidence of tubercle was found in the right lung, and the patient was therefore ordered to be discharged January 20, 1864.

CASE VII.—WOUND OF RIGHT DELTOID; SENSORY AND SLIGHT MOTOR PARALYSIS OF RIGHT ARM; SPEEDY RECOVERY.

MICHAEL FARRELL, æt. 28, farmer, born in New York, enlisted September, 1861, company "I," 20th New York Vols.; a vigorous, healthy looking man; was well up to date of enlistment. At Fredericksburg, December 13, 1862, he was shot in the left shoulder while lying down. The ball entered the erector spinæ mass of muscles on the left side, on a level with the lower angle of the scapula, and passing upwards and outwards, lodged under that bone; the wound healed readily, the ball remaining. February 3, went to duty. July 1, 1863, a small ball passed through the right deltoid muscle, three inches above its insertion, into the humerus. The ramrod fell from his hand and the arm dropped. He retired to a hospital, and on examination, found that although he had all the movements of the arm he had no sensation.

During the next four days he was exposed to the sun a good deal, and the arm being bare, was blistered, which, he says, to a great extent restored its feeling, which has since gone on improving. There is now, July 25, 1863, some slight paralysis of motion, but all the movements are feeble, and those of the arm painful, owing to the contractions about the ball track; the arm improved, and the man was returned to duty October 22, 1863.

Before proceeding to discuss the causes which give rise to reflex paralysis, it will be useful to analyse the symptoms of the preceding cases, so as to learn how they differ and in what respect they resemble one another.

THE German journals announce the death of Heinrich Müller, Professor of Medicine at Würzburg. He was cut off by erysipelas. Also died, on May 13th, at Göttingen, Rudolph Wagner, the well known physiologist.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, January 13, 1864.

DR. D. S. CONANT, PRESIDENT, IN THE CHAIR.

(Continued from page 273, vol. viii.)

DR. LOUIS BAUER presented two specimens which he had removed from bodies having been subject to coroners' inquests, for which reason their history was imperfect.

1st. *Tubular foetation; rupture of the tube and hæmorrhage; utero-pelvic hæmatocle attended by symptoms denoting corrosive poisoning.*—The body from which this specimen was taken had been buried four weeks. The patient was a married woman, 33 years of age, and of moderately good health, when suddenly she was attacked with violent præcordial pain, unquenchable thirst, and persistent emesis. Everything she swallowed seemed to aggravate her distress, so much so that she refused to take anything, expressing at the same time her conviction of being poisoned. A few hours before death jaundice of a deep tinge appeared.

With this information Dr. Bauer entered upon the autopsy fully prepared to find the evidences of gastritis occasioned by poison. The condition of the abdominal organs exhibited a widely different cause of death. There was no corrosion or discoloration of the mucous membrane of either the oral cavity, the stomach, or intestine. The intestinal tract was pale and empty, and exhibited scarcely the ordinary vascularity. The liver seemed to be of healthy structure, but discolored by biliary matter. The moderately distended gall-bladder contained numerous small calculi of a dark color, which did not obstruct the passage of bile. The peritoneal cavity was moderately filled with bloody serum and a few coagula. Its surface was spotted with thin deposits of lymph, not sufficient to agglutinate the folds. The left side of the pelvic cavity was occupied by a semi-solid tumor the size of a large orange, smooth and dark-colored, displacing the uterus to the right. The tumor arose from the bottom of the pelvis, occupying the left lateral ligament, which spread like a tent over it. After a careful removal of the pelvic organs it was found that the said tumor consisted of a large homogeneous blood-clot from eight to ten ounces in weight. The uterus was larger, rather vascular, but otherwise healthy. The right fallopian tube was to the extent of three inches distended, so as to admit easily the thumb. On its posterior circumference there was a small perforation with ragged margins.

The specimens, consisting of uterus and appendages, with part of the walls of the hæmatocle, were then exhibited, but unfortunately they were somewhat advanced in decomposition, and therefore did not admit of a very careful examination. Dr. Bauer remarked that this was the second case in which coroners' inquests had been demanded on suspicion of poisoning, the symptoms being so analogous with those emanating from corrosive poisons. In the former there had been but simple tubular pregnancy and final perforation of the tube. The patient lived but twenty-six hours after the first symptom had set in, death being obviously caused by persistent but moderate hæmorrhage. In both cases pain and emesis were incessant. Whether the hæmatocle had been brought on by emesis from the largely distended uterine plexus could, of course, not be determined.

2d. *Otitis interna, causing pericranitis and meningitis.*—The specimens belonging to this case consist of the right temporal, and part of the occipital bone divided in four parts, the right hemispheres of the brain and cerebellum, and of a piece of the dura mater removed from the right side and base of the cranial cavity. These had been removed from the body of a young man who had died under the following circumstances. About six weeks previous to his death the deceased had been in a rencontre with others, had been severely handled, and it was alleged had received some

blows on the side and back of his head. A week after, he had commenced complaining of increasing pains in his head, especially on the right side, had become febrile and delirious, and ultimately died with symptoms of acute encephalitis. A few days previous to his death fluctuation was discovered behind his ear, and on opening the abscess the cranium was found carious. A fracture or fissure having been suspected as the result of violence, an inquest was instituted, the results of which were as follows:—There was no fracture, fissure, or depression of the skull, but a superficial caries about the mastoid process and the adjoining portion of the occipital bone, the matter having burrowed between the muscles inserted in that locality. There was meningitis over the right side, and the dura mater was in different places raised off from the bones by underlying lymph. Such was particularly the case on the cranial surfaces of the petrous portion. From thence the inflammation had extended to the meningeal covering of the cerebellum, and the right hemisphere of the brain, especially the internal surface, was covered with a thick layer of plastic lymph, not extending, however, to the corpus callosum or the left hemisphere.

With this state of things the other pathological conditions of the brain were in keeping. It was evident that there had been a local cause for the one-sided meningitis. Dr. Bauer suspected internal otitis, and for this reason a careful section of the petrous and mastoid portion of the right temporal bone had been made. The condition fully verified the supposition, for the tympanic membrane was found to be destroyed, the external meatus and tympanic cavity filled with semi-fluid matter, evidently purulent. There was no trace of the ossicula. A small opening in the roof of the tympanic cavity led to a place evidently affected with osteo-porosis, if not with caries. This place was situated near the base, the superior angle and posterior surface of the petrous bone. The mastoid cells were rather smaller than usual, and in a state of hyperplasy. Thus the natural causes of death were elicited.

Dr. Bauer adverted to a similar case in which he had been the consulting attendant. The patient was a young lady who had suffered from otorrhoea since childhood. Having been attracted by the advertisements of a notorious quack of New York, she submitted to his treatment. The wash he applied to her ear had the desired effect in removing the discharge, but soon after the most violent pains in her ear ensued, and the curative attempt culminated in encephalitis and death. On post-mortem examination a condition similar to the foregoing case was found.

THE CONTAGIOUSNESS OF CONSUMPTION is the subject of a paper read before the Boston Society for Medical Improvement, April 13, 1864, by Henry L. Bowditch, M.D. His investigations lead him to believe that consumption is not contagious in the usual acceptance of that word, but that it may be infectious to a certain extent; so that, by long and constant attendance upon those sick with this disease, and living in an atmosphere loaded with the emanations from the lungs of such patients, the health may be undermined, and phthisis set in. For this reason he would warn a wife, or a sister, or a near female friend, from too close a devotion to a consumptive husband, sister, or friend. Sleeping in the same bed, or even in the same room with the sick one, should be avoided. The attendant should pay strict attention to hygienic rules, especially as regards diet and frequent exercise in the open air.

ANÆSTHESIA FROM CHLOROFORM PROLONGED BY THE HYPODERMIC INJECTION OF MORPHIA.—PROFESSOR NUTBAUM, of Munich, reports a number of cases of anæsthesia being prolonged from eight to twelve hours by injecting beneath the skin, while the patient is under the influence of chloroform, one grain of the acetate of morphia. The patient sleeps, breathing regularly and calmly, during the most severe and prolonged operation, and finally awakes as if he had just passed through a chloroform narcotism.

American Medical Times.

SATURDAY, JULY 2, 1864.

REVIVAL OF MEDICAL JOURNALISM.

THE war of the rebellion has well-nigh obliterated medical journalism in this country. Where we once counted our exchanges by scores, we can now count them on our fingers' ends. In the Southern States, once so prolific in medical periodicals that each considerable town had one or more representatives, the whole serial medical literature has long since disappeared. A nondescript journal, entitled the *Confederate Medical and Surgical Journal*, has lately appeared, but as it has not favored us with an exchange, we have only heard of its existence through a sympathizing foreign journal. At the North the effect of the war has not been less disastrous. The list of periodicals has undergone thorough revision, the names of many having been permanently erased, and the size and appearance of others materially changed.

Long familiarity with the medical journals of the country leads us to regard these reverses as favorable to a higher order of excellence than heretofore. Previous to the war these publications had so multiplied as to give to every locality its medical journal. A large number were the organs of schools or other local interests, and few, comparatively, were devoted to medical science. With but two or three honorable exceptions, the medical journals of the South were unworthy the patronage of the profession. They were flippant in tone, often filled with coarse and abusive language, and destitute of scientific merit. The sudden obliteration of the greater number cannot be considered otherwise than as a blessing to the profession of the South. Many medical periodicals at the North were not free from the same low and vulgar cant, and in two or three instances they even surpassed their Southern contemporaries. But these publications have gone the way of their Southern congeners, and the field of serial medical literature is now comparatively free from objectionable periodicals. The effect of the war upon medical journalism cannot, therefore, be regarded in other than a favorable light. It has simply purified an atmosphere foul with noxious gases. But there are some indications of a revival of our periodical literature, and we rejoice to notice decided evidences of a generally improved tone and a much more thoroughly scientific character.

One of the first and most serious defects in medical journalism has been a want of independence. This is seen in the discussion of nearly every subject affecting the general interests of the profession. If it is education, journals have hitherto been influenced too much by its bearing upon individual schools. The great questions underlying it, and on which is based the advancement of the profession, are overlooked or selfishly ignored. Clinical instruction, which has a most vital relation to a sound medical education, has been approved or ignored according to the situation of the school to which the journal was attached. Too little regard has been paid to the scientific accuracy and literary character of original papers. It is not always an easy task to fill the original department of a journal with well prepared and highly scientific articles, for too frequently the best class of

medical men in any given locality do not write. But this does not prevent the thorough sifting of such papers as are presented for publication, and elimination from them of erroneous or inaccurate statements. The style of composition of the majority of our medical writers is faulty, and in very many instances is barbarously incorrect. It is the duty of the conductors of medical journals to remedy this defect either by excluding such articles altogether or by giving them thorough revision.

The review department of medical journals is generally very defective. No person is a really competent reviewer who has not a knowledge of the work in hand at least equal to that of the author. But this important portion of journalism is too often almost wholly assigned to inferior writers. There is great need of a medical periodical in this country devoted to elaborate and exhaustive reviews, with severe and impartial criticism.

In the revival of medical journalism in this country we hope to witness a new era in our serial literature. Journals should be established on an independent basis, and only writers of acknowledged ability engaged in their management. The profession should discountenance periodicals that are supporting schools or other interests of a merely selfish character, and liberally patronize those which exhibit a high order of scientific and literary excellence.

REGISTER OF QUALIFIED PRACTITIONERS.

THE question often arises in regard to the regularity of certain medical men in the city, and we have had no ready means of arriving at a satisfactory conclusion. This desideratum is now supplied in the recently published Medical Register of New York, by Dr. FURMAN. We find here a list "of duly qualified Practitioners of Medicine in the city and county of New York, who have not dissented from the established doctrines of the medical profession." This list of names has been so thoroughly canvassed that we believe it may be accepted as an "infallible guide" by the profession. Whoever examines it will be surprised to find some names there recorded as "regular," which have no place on the rolls of our societies, and names omitted which pass current in respectable medical circles. But these registrations and omissions have been made only after a most searching inquiry. We have, therefore, in New York, a reliable register of qualified and regular practitioners.

TRANSPORTATION OF COMPOUND FRACTURES.

THE means of transportation of those suffering from compound fractures of the leg from the battle-field to permanent hospitals, without subjecting the limb to movements which will create additional injury, are still wanting. Vast numbers of these cases occur in every battle, and though capable of recovering if immediately placed under treatment, are generally transported long distances, over rough roads; and the result is, that they necessarily terminate fatally. Some efforts have lately been made to introduce the plaster-of-Paris dressing, and we agree with our correspondent that it offers the most available apparatus yet devised. Recent experiments have been made with the gypsum, which have resulted in an increase in the porosity of the material. Ordinarily the gypsum and the water are mixed in equal proportions, but they may be varied to suit the manipulator. But it is found that very *light* and *porous*

splint casts may be made by preparing the plaster paste as follows:—

Gypsum, 75 parts, by weight.
Water, 100 parts, "
Starch, 1½ to 2 parts, "

The starch to be boiled clear, in a small quantity of water. If the "setting" of the plaster is too slow, add a little salt. A small proportion of viscid starch tends to delay the "setting" of the plaster, and it may be used for that purpose instead of glue. After the strips of cloth are cut and all is ready, the application of the materials and the completion of the work need not occupy more than ten minutes. Fenestræ or windows for drainage or for observation may be provided beforehand, by cutting the proper apertures in the strips of cloth before immersing them in the plaster paste.

REPORT OF A MEDICAL CORONER.

THE importance of filling the place of coroner with educated medical men is illustrated in the Middlesex District, London. DR. LANKESTER, a name familiar in medical literature, was elected the successor of the late MR. WAKLEY, and now brings forward a report of his annual labors. It is replete with most interesting statistics, and proves not only the rare capacity of the man for the place, but equally the fitness of a man with a medical education for the office of coroner. The following in regard to the still-born (*Lancet*) nearly finds its parallel in New York:

"A class of cases in which inquests abound, which furnishes subject for serious reflection and suggests room for amendment, is that of still-born children. DR. LANKESTER classifies the motives for exposing these children under three heads:—

"1. They are legitimate children, whose parents seek, by casting them into the street, to get rid of the necessity for paying the expenses of any kind of funeral.

"2. They are thrown into the street by persons who, having received a fee for burying them, avoid this expense by casting them away.

"3. They are illegitimate children, whose mothers, having borne them in privacy, seek, by secretly throwing them away, to hide their shame.

"DR. LANKESTER adds that 'the absence of any registration of still-born children is undoubtedly a source of crime. Children are often brought to the undertaker for burial as still born, with whom he has no guarantee that they are really still-born; and, where women can find accomplices, this system presents a very ready method of getting rid of children without any inquiry as to the cause of death.'"

Correspondence.

CHICAGO.

Special Correspondence.

THE Illinois State Medical Society has to-day concluded its annual session, after an interesting meeting protracted through three days in this city. Though not characterized by a large attendance, the ability of the delegates, the pleasing harmony of feeling, and the value of the papers read before the Society, concurred to render it one of the most satisfactory sessions of the Association. It was gratifying to remark the spirit with which all participated in the proceedings. A desire to improve the time in such a manner as to increase each one's stock of knowledge as far as possible, seemed to animate all; and there was very little of that aimless, endless *talking*, which is the scourge of too many similar gatherings. The discussions which

followed the reports of the several standing committees were brief, pointed, and impartial inquiries after truth, and were in no instance made an occasion for self-glorification and the antagonism of rival crotchets. In this respect the meeting deserves to be presented as a pattern for the contemplation of more than one scientific body that can boast of antiquity, importance, and prestige far above that of its western sister.

Such were the merits of the session. And yet it must be confessed that some things were lacking. In this youthful, bustling community there has not yet been time sufficient to produce that class of men whose position has been so firmly secured against the assaults of care, that they can devote their whole energy to the advancement of knowledge and the extension of science. The man whose life is exhausted in battle, with the prairie storms of winter, and the poisonous malaria of summer, is not one from whom much can be exacted in the way of writing and teaching. Such a life breeds thinkers rather than authors, learners rather than teachers. This was apparent in the hurried style and incomplete processes of thought which marked one or two of the reports, while others, though perfect in form and interesting in matter, yet added nothing to the number of facts already placed before the world, and were therefore chiefly valuable as affording a convenient abstract of what has been produced in the literature of medicine. The following brief outline of proceedings will show what was accomplished by the Society:—

The members of the Illinois State Medical Society were called to order in the Council Chamber of this city at ten o'clock, A.M., Tuesday, May 3d, 1864. After the usual preliminaries, the day was devoted to the reports of the standing committees and to such voluntary communications as might be presented by any member of the Society. The greater portion of the second day was occupied in the same way. At the close of the afternoon session the Society proceeded, by invitation, to visit the Rush Medical College and the United States Marine Hospital, where, after a thorough inspection of the well ventilated wards of the building, the exercises of the day were agreeably concluded by a neat little entertainment in the rooms of the Surgeon-in-charge, Prof. R. N. Isham, M.D., and his assistant, Dr. E. S. Terry.

Having dispatched a quantity of miscellaneous business, the forenoon of Thursday was devoted to the report of the Committee on Practical Medicine, which was read by the Chairman of the Committee, Prof. N. S. Davis, of Chicago. This report was arranged in two parts, the first of which considered the different modes of improving the practice of medicine, while the second was devoted to a discussion of the various diseases which have prevailed, epidemically, within the limits of the State of Illinois during the past year. The diseases thus distinguished were variola, erysipelas, typhoid fever, and cerebro-spinal meningitis. The three first mentioned were prevalent in Chicago during the fall and winter of 1863, and now only occur sporadically. No unusual features presented themselves in connexion with these diseases. The mortality from typhoid fever in the practice of Dr. Davis, covering over one hundred cases during the past winter, was eight per cent. Cerebro-spinal meningitis has prevailed mostly in the central and southern portions of the State, but scattered cases have appeared in other localities. The disease occurs most frequently during the colder half of the year, yet it occasionally appears during the summer months. Many cases have been mistaken for sun-stroke, or meningitis, or pernicious fever. Children and young people were most susceptible to attack. The onset of the disease is sudden and violent, usually commencing with a chill. Its concurrence with erysipelas is remarkable. Prof. Allen, who read to the Society an interesting paper on cerebro-spinal meningitis, is almost ready to believe the two diseases branches from the same root. The lungs, also, are peculiarly liable to inflammation if the meningeal disease is protracted in its duration. Death may occur within a few hours, as in per-

nicious fever, or it may be delayed for days, or even for weeks; consequently the pathological appearances displayed by dissection are extremely various. Those cases which terminate speedily present little of a pathological character; but if the disease has progressed beyond the stage of reaction, the changes characteristic of cerebro-spinal inflammation are always detected. All sorts of remedies have been employed in the treatment of this formidable disease, but no one plan has met with uniform favor. Prof. Allen considers it a zymotic disease, producing effects in the system analogous to those produced by uræmic poisoning, and he thinks that the treatment of uræmia will be, more than any other form, successful in cerebro-spinal meningitis. He advocates a stimulant and diuretic plan of treatment—tinct. cantharid. in large and frequent doses, even to the production of strangury, in which event it is his experience that the patient always recovers. Quinine seldom benefits the sufferer; it sometimes does harm. This fact affords one of the diagnostic signs by which this disease may be distinguished from pernicious remittent fever. Prof. Davis, in his masterly paper, gave the following indications for treatment:—Maintain the vital functions; counteract the tendency to local inflammations; combat such inflammations when they occur. To this end he promotes reaction from the introductory chill by the use of free caloric and electricity. Bags of ice are applied to the spine, hot flannels to the epigastrium and extremities. Alcoholic stimulants are deprecated, but great advantage may be expected from the use of the "true organic stimulants," such as the tincture of cantharides, of which twenty or thirty minims may be administered every hour until reaction is complete. The tendency to local inflammation, which, by the way, is always asthenic in its type, must be counteracted by the administration of the chlorate of potash with belladonna, and with iron if the concurrence of erysipelas is imminent. After the first stage stimulants are to be omitted, and counter-irritant applications may be made over the spine, while alteratives and diuretics are exhibited. Purgatives should be avoided.

An interesting report of his experience in the treatment of cerebro-spinal meningitis was read by Dr. McVey, and several gentlemen related the history of cases that had fallen under their observation.

The attention of the Society was called to the subject more than once during the session; in fact it seemed to excite more interest than any other topic presented for discussion, but no general result was reached. The want of a statistical report was very apparent, and one cannot but sympathize in the feeling with which Prof. Davis entreated the members of the society to record, if the opportunity should again present itself, even the most insignificant of concurrent atmospheric and telluric phenomena, as well as everything connected with the natural history of every case of this most terrible disease.

Reports were made by the different members of the Committee on Surgery on the specialties consigned to their notice, but time forbids anything more than this allusion to a subject which will be found ably handled in the forthcoming volume of Transactions. After the usual elections and appointments, the Society adjourned for one year. During the afternoon, after adjournment, the members of the Association proceeded by invitation to visit the new Chicago Medical College building, where they were addressed, on behalf of the faculty, by Prof. Davis, who made a clear and forcible statement of the objects for which the college was founded, and the theory upon which the course of instruction was based. From the college the party was conducted to the wards of the adjacent hospital, which is in charge of the Sisters of Mercy. Having sufficiently admired the order and comfort apparent in every portion of this meritorious institution, the excursion was prolonged to Camp Douglas, where the United States Hospitals were reviewed, under the guidance of Surgeon Grove, U.S.A., the Surgeon-in-charge of the post. After witnessing a parade of the troops stationed on guard duty in the camp,

and having enjoyed that splendid courtesy so characteristic of the true military gentleman, the party returned to the city, whence the railway trains soon hurried a majority of the number to their homes in the country, and the twelfth annual meeting of the Illinois State Medical Society was an event of the past.

MAY 5th, 1864.

FREDERICKSBURG.

Special Correspondence.

THE disposition of the wounded throughout the city is the most available that can be made under the circumstances. At first only the larger buildings were used, but as the number of patients rapidly increased, other less suitable buildings had to be opened, and finally the necessity became so great that almost every house of any considerable size was seized. Old stores, warehouses, printing-offices, etc., without ventilation, and filthy and musty in the extreme, were occupied. As there were no bedsteads or bed-sacks the patients were laid upon the uncleared floors on their wet and soiled blankets. Being impressed with the importance of keeping their wounds constantly wet, each wounded man carried his canteen well filled with water, and every few minutes deluged his limb. The effect was to render their clothing wet, and oftentimes to flood the floor with water.

It was very evident that the gathering of so many patients upon the floors of old, deserted, filthy and confined buildings, having wounds that must lead to enormous supuration, and at the same time almost destitute of every convenience for cleanliness, would result in a fearful mortality from low forms of disease. Nor has that anticipation been unfulfilled. Pyæmia, erysipelas, etc., promptly occurred, with all their destructive results. Tetanus also appeared, and has prevailed to an alarming extent. No one observing the condition of the wounded for several days, and marking their rapid deterioration after they entered these old buildings, could doubt that they would have done much better exposed to the open air upon the adjacent hills. Much as the sympathy of the people may be excited by the long exposure of the wounded upon the field before they are placed in hospitals, there is no doubt in my mind that in this pleasant weather such exposure to the elements is infinitely less dangerous than exposure to the poisonous atmosphere of old deserted buildings. It was a frequent remark that the wounds of those who had lain two or three days on the field were in a perfectly healthy condition.

Only the severely wounded remained at Fredericksburg. The wounds were of every conceivable kind. The severest wounds were received in the head, neck, and upper part of the chest, which for the most part took an oblique direction from before, downwards, and backwards. This direction of the track of the ball was due to the fact that much of the fighting was done by both armies while lying upon their faces. In some instances the ball penetrated the supra-clavicular region, and lodged deeply among the viscera.

There was also the usual number of compound fractures of the lower extremities, in which the limbs had not been amputated. Many of those were suitable cases to be saved provided there were means to that end. But under the circumstances of their admission to the Fredericksburg hospitals they admitted of only palliative treatment. The period for primary amputation was passed, and the period for secondary amputation had not arrived. Permanent dressings for union of the fractures were wanting, and besides, these hospitals were only temporary stopping-places, and a long and tedious transportation awaited them. We could only place these patients upon "bunks," adjust the limb, attach a suitable weight to the foot, and place sand bags upon the sides of the fractured portion to retain it upon its posterior surface. This dressing gave great comfort; and when a hole was cut through the bed oppo-

site the posterior wound, so that the discharge could be free, the limb was left entirely undisturbed. Many of these cases would have recovered could they have been left for a suitable time in such dressings.

I have a reflection or two to make in regard to the treatment of compound fractures of the thigh. It occurred to me that the surgeon upon the field, on examining one of these cases with reference to amputation or an attempt to save the limb, does not attach sufficient importance to the matter of transportation. Evidently if a patient can be quietly borne from the field to a permanent hospital without adding anything to the local injury, the great majority of cases of compound but uncomplicated fractures of the thigh might be saved. The experience of modern military (conservative) surgeons will, I believe, bear me out in this assertion. But if, as in the present instance, transportation is over rough roads and a long distance, with very inadequate means of supporting the limb, I have no hesitation in saying that primary amputation should be performed in nearly, if not every instance. We often had an opportunity of placing patients side by side, one in good general condition, with a fine healthy stump and every prospect of immediate recovery; the other beginning to suffer from irritative fever, his limb swollen, and his general condition rapidly deteriorating. In this connection we must refer to a very timely article on the importance of primary amputations, in the *Am. Jour. Med. Science*, by Dr. Lidell, U.S.V.

Again, we are struck with the imperfection of the dressings which the army surgeon applies to compound fractures of the lower extremities for transportation; we saw many cases in which Smith's Anterior Splint was applied upon the inside and outside of the limb and firmly bandaged; others in which wooden splints, padded, were similarly employed. In no instance had the limb been held firmly in position, and in all cases the swelling that had occurred rendered the dressings so tight that gangrene was imminent. We were surprised to learn that the plaster-of-Paris, or gypsum dressing, is never used by the army surgeon, either as a temporary dressing for transportation, or as a permanent dressing in compound fractures. There can be no doubt of the value of this dressing for transportation. It is made to inclose the limb so far as to completely command all its movements, and at the same time leave the limb so much uncovered as to avoid the danger from subsequent swelling. All the materials for these dressings are reducible to the smallest bulk. A small quantity of plaster and old cloth is all that is required. The time necessary for its application is but eight or ten minutes.

Army and Navy.

GENERAL ORDERS, NO. 218.

WAR DEPARTMENT, ADJUTANT-GENERAL'S OFFICE,
WASHINGTON, D.C., June 18, 1864.

I. All sick and wounded officers, absent from their commands and not fit for duty in the field, but able to sit on Courts-Martial, will immediately report their names and address to the Adjutant-General of the Army.

II. All staff and regimental medical officers, now on leave in the Department of the East, in New Jersey, the eastern part of Pennsylvania, and the eastern part of Maryland, if able to travel, will report to the nearest Medical Director for examination; and those found unfit for active service, but able to do hospital duty, will be ordered to report immediately at the Hospital at Camp Parole, near Annapolis, Maryland, for such duty as the Surgeon-in-charge may require of them.

By order of the Secretary of War:

E. D. TOWNSEND,
Assistant Adjutant-General.

ARMY.

ORDERS, CHANGES, &c.

APPOINTMENTS.

Dr. George H. Blickhahn, of Missouri, to be Surgeon 2d United States Colored Troops.

Assistant-Surgeon W. B. Crandall, 29th Connecticut Vols., to be Surgeon 38d U. S. Colored Troops.

Acting Assistant-Surgeon C. K. Hendee, U.S.A., to be Assistant-Surgeon 107th U. S. Colored Troops.

Dr. B. F. Harrison, of New York, to be Surgeon 108th U. S. Colored Infantry.

Dr. J. Lysander Eaton, of Missouri, to be Assistant-Surgeon 2d U. S. Colored Troops.

Dr. Eldred P. Gray, of New York, to be Surgeon 101st U. S. Colored Troops.

Warren A. Woodson, of Pennsylvania, William Pittis, of Ohio, D. S. Lamb, of Pennsylvania, and L. E. Cooper, of Massachusetts, to be Hospital Stewards in the U.S. Army.

RESIGNATION.

Surgeon David B. Sturgeon, U.S.V., to take effect April 3, 1864.

ORDERS.

Surgeon C. W. Jones, U.S.V., is hereby relieved from duty as Assistant Medical Director, Department of the Cumberland, and assigned to duty as Medical Director of the 14th Corps, reporting to Major-General Juo. M. Palmer, Commanding.

Surgeon William I. Wolfey, U.S.V., and Assistant-Surgeon P. Glenan, U.S.V., will report to Surgeon R. O. Abbott, U.S.A., Medical Director, Department of Washington, for assignment to duty.

Assistant-Surgeon George B. De Grassi, U.S.V., will report to the Commanding General, Army of the Potomac, for assignment to duty.

Assistant-Surgeon J. T. Brown, 94th New York Vols., will report for temporary duty to Surgeon F. H. Gross, Camp Parole, Annapolis, Md.

The Quartermaster-General, U.S.A., will direct that the following named buildings be leased for one year, for hospital accommodations in the Department of the Susquehanna:—

The building at Beverly, N. J., examined and reported upon by Lieutenant-Colonel John L. Le Conte, Medical Inspector, U.S.A.

The building at Whitehall, Pa., examined and reported upon by Assistant-Surgeon C. H. Alden, U.S.A.

ASSIGNMENTS.

Surgeon Francis Green, U.S.V., as Surgeon-in-charge, Eruptive Fever Hospital, Louisville, Ky.

Surgeon A. C. Schwarzwelder, U.S.V., as Surgeon-in-charge, Totten General Hospital, Louisville, Ky.

Assistant-Surgeon A. E. Carothers, U.S.V., as Surgeon-in-charge, Post Hospital, Brownsville, Texas.

Surgeon C. S. Frink, U.S.V., as Surgeon-in-Chief, 1st Division, 23d Corps, Army of the Ohio.

Assistant-Surgeon H. C. Roberts, U.S.V., waiting orders.

Surgeon A. M. Clark, U.S.V., as Surgeon-in-Chief, 1st Division, 18th Corps, Army of the Potomac.

Surgeon J. B. Morrison, U.S.V., as Surgeon-in-Chief, 3d Division, 18th Corps, Army of the Potomac.

Assistant-Surgeon S. J. Radcliffe, U.S.V., as Medical Reporter, 5th Corps, Army of the Potomac.

Acting Assistant-Surgeon R. H. Bishoff, U.S.A., to Totten General Hospital, Louisville, Ky.

Acting Assistant-Surgeons J. J. Thrift, U.S.A., and D. Richards, U.S.A., to Joe Holt General Hospital, Jeffersonville, Ind.

LEAVES OF ABSENCE.

Surgeon C. J. Kipp, U.S.V., for seven days.

Assistant-Surgeon J. H. Doughty, U.S.V., for twenty days.

Hospital Chaplain M. J. Gonzales, for twenty-five days.

Hospital Chaplain S. S. Morrill, for thirty days.

DIED.

Hospital Steward James H. D. Shaw, U.S.A., June 12, 1864, at Key West Barracks, Fla., of yellow fever.

NAVY.

Regular Navy Orders.

Surgeon John Thornley detached from the Naval Rendezvous, New York, and waiting orders.

Surgeon William E. Taylor detached from Tuscarora and waiting orders.

Surgeon Robert Woodworth ordered to the Naval Rendezvous, New York.

Assistant-Surgeon William H. Jones ordered to the Practice Steamer Marblehead.

Assistant-Surgeon A. S. Oberly detached from the Naval Academy and ordered to the Macedonian.

Assistant-Surgeon Adolph A. Hoehling detached from the Roanoke and waiting orders.

Assistant-Surgeon George W. Woods ordered to the Roanoke.

Assistant-Surgeon Daniel M. Skinner ordered to the Marion.

Surgeon R. O. Dean to duty at the Park Barracks, New York.

Assistant-Surgeon Samuel G. Weber ordered to the China.

Assistant-Surgeon J. O. Burnett detached from the Naval Hospital, Norfolk, Va., and waiting orders.

Surgeon Edward F. Corson, orders to the Ohio revoked.

Surgeon James Luddards detached from the Canandaigua and waiting orders.

Surgeon Philip Lansdale ordered to the Canandaigua.

Surgeon William E. Taylor ordered to the Ohio at Boston, Mass.

Volunteer Naval List.

Edward W. Avery appointed Acting Assistant-Surgeon, and ordered to the Banshee.

Charles S. Green appointed Acting Assistant-Surgeon, and waiting orders.

William J. Simonson appointed Acting Assistant-Surgeon, and ordered to temporary duty on the Princeton.

Woodbury J. Frost appointed Acting Assistant-Surgeon, and ordered to temporary duty on the Ohio.

Acting Assistant-Surgeon Samuel S. Adams, resignation accepted.

Acting Assistant-Surgeon M. F. Delano ordered to the Currituck.

Acting Assistant-Surgeon Henry Johnson detached from the Currituck, and ordered to the Pawtuxet.

Acting Assistant-Surgeon Benjamin F. Bigelow detached from the Albattross, and waiting orders.

Original Lectures.

LECTURES ON GUNSHOT INJURIES OF THE ABDOMEN.

By FRANK H. HAMILTON, M.D.,

PROF. OF MILITARY SURGERY AND FRACTURES AT BELLEVUE HOSP. MED. COLLEGE, AND LONG ISLAND COLLEGE HOSPITAL; SURGEON TO BELLEVUE HOSPITAL; LATE MEDICAL INSPECTOR, U.S.A.

LECTURE VI.—PART VI.

Gunshot Wounds of the Liver.

WHEN a ball has penetrated this organ death generally ensues in a very few hours from internal hæmorrhage; and in the large majority of cases when, owing to the more superficial course of the missile, a fatal hæmorrhage does not occur, death follows in a few days from the super-vention of inflammation both in the substance of the liver and in the peritoneum.

Occasionally, however, the patient survives a long time, or makes a complete recovery.

During the night of the 8th of June, 1853, a Buffalo city policeman, Wm. Dickerson, was shot by a pistol ball, which entered his abdomen one inch to the right of the median line, and midway between the ensiform cartilage and the umbilicus, and escaped six inches from its point of entrance on the same side of the body, between the eleventh and twelfth ribs. One hour after the receipt of the injury he had no cough, only very slight hæmorrhage, and there was no difficulty in ordinary respiration. He was pale and somewhat prostrated. A probe, carefully introduced at the point of exit, passed fairly through the intercostal space beneath the ribs; which fact, together with the general direction of the wound, left no reasonable doubt that the ball had struck the convex surface of the liver.

The wounds were closed by adhesive plasters, but the hæmorrhage increasing, these had to be removed. During the first twenty-four hours the patient lost in this way probably a pint of blood; after this the bleeding gradually ceased. The blood was dark-colored, apparently venous. Morphine was administered, one quarter of a grain every four hours. In the evening of the first day he had great pain and tenderness over the region of the liver, and eight leeches were applied. After the leeches had drawn, warm fomentations were laid over the abdomen, and these, with the opiates, were continued several days. In a few days the anterior orifice began to discharge pus, the posterior wound having become closed very easily. The tenderness gradually abated, and in a month all discharges ceased. Four months later I found him well, except that there remained some tenderness over the region of the liver.

Guthrie says that Corporal Macdonald was wounded at Quatre Bras by a musket ball, which was supposed to have passed through the liver. A copious purulent and bilious discharge followed, and on the fourteenth day there was a hæmorrhage amounting to twenty ounces. The bilious discharge finally ceased, and he was discharged convalescent on the 2d of Sept., about ten weeks after the receipt of the injury.—He also reports in detail three other cases. In the case of Lieut. Hooper, who was wounded through the anterior edge of the liver by a ball, in about five weeks he was found convalescent. A soldier of the 48th regt., wounded through the liver, was sent home with his wounds healed. An officer wounded in the battle of the Pyrenees had a fistulous discharge from the liver for several years, the ball having lodged somewhere in the abdomen, probably in the liver itself. Mr. Guthrie also informs us that he has seen three other persons wounded through the liver, to whom little subsequent inconvenience was occasioned. In the case of Lieut.-General Sir S. Barns, not enumerated in the above record of examples, a portion of the rib entered and was removed from the liver. He recovered a tolerable degree of health, and survived many years.

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The symptoms which characterize this accident are, in addition to the evidences furnished by the direction which the ball has taken, great prostration, due in part to the shock and in part to the hæmorrhage; sometimes a troublesome cough, with embarrassed respiration; pain referred generally to the seat of injury; but in the case of Lieut. Hooper, already quoted, the pain was in the shoulder, and he could scarcely believe at first that this was not the point where the wound had been received.

After a few days the ordinary symptoms of hepatitis supervene, accompanied with a yellow tinge of the skin and of the urine, the absence of this color in the fecal evacuations, and finally in most cases a discharge of pus, more or less tinged with bile.

The treatment consists in the employment of the usual antiphlogistic remedies, and in absolute rest.

There is less objection in these cases to an exploration of the wound than in similar wounds of the intestines or stomach, inasmuch as there is very little or no danger from fecal extravasations. It is desirable, however, as far as possible to maintain apposition of the wounds, so as to secure the escape of the blood externally in the first instance; and at a later day, through the adhesions which may occur, to direct the pus and bile safely to the surface.

In case the ball is supposed to be lodged in the liver, or the fragment of a rib has been driven in, it is proper to explore, and, if necessary for their removal, to enlarge the wound in the walls of the belly. The wound in the liver cannot be enlarged safely by the knife, but it may be dilated by the finger when the extraction of a foreign body renders it necessary.

Legouest removed a ball which had traversed the liver, from the back, after suppuration had taken place. "The patient got well of the wound, but succumbed a little while after from inflammation occasioned by excessive drinking."

Gunshot Injuries of the Spleen.

I am not aware that any one has ever seen a recovery after a gunshot wound of this organ.

It is said, however, that a soldier was found after the battle of Dettingen with his spleen protruding and covered with dirt; the surgeon cut it off, and the patient recovered. (*Notes to Chelius by South.*) A case also is reported in the 9th vol. of the Philosophical Transactions, 1737, of a man whose spleen was thrust out through a large incised wound, and being in part gangrenous; the surgeon, named Ferguson, tied a strong ligature above the unsound part, and cut off three ounces and a half of the spleen. He recovered completely. Dr. MacDonnell gives a case of excision of the spleen in the 8th vol. of the Transactions of the Medical Society of Calcutta, the patient being well two months afterwards; and another case is reported in the *Dublin Medical Press* for Sept. 18, 1844, in which the patient survived thirteen years.

Gunshot Wounds of the Kidney

are indicated by the direction which the ball has taken, pain in the cord and testes, causing retraction of this latter organ, and extending more or less down the limb of the side affected, bloody urine, and occasionally by the escape of urine through the wound.

Recoveries after this accident are very rare. A few die of hæmorrhage, a larger number from the subsequent inflammation, and some linger several weeks or months, and finally are exhausted by excessive irritation and suppuration.

Guthrie saw one case after the battle of Waterloo which seemed to promise a recovery. An officer wounded on the 9th of Dec., 1813, by a ball which penetrated either the kidney or the upper end of the ureter, survived at least six or seven months, and at the end of this time passed, by the fistulous orifice, a piece of cloth which had been driven in by the ball. The final result of the case is not stated, but there cannot be much doubt that it terminated fatally.

A case came under the observation of Mr. Longmore in

the Crimea, where the patient survived ten days, but in the meantime extensive abscesses had formed among the gluteal muscles and down the thigh.

Légouest reports the only case which has come to my knowledge in which a cure of the wound in the kidney seems to have been established. A Russian soldier was wounded at Inkermann by two balls, one having passed through one of the kidneys, and the other through the left knee, to which latter wound he finally succumbed. The autopsy revealed the fact that "the ball had traversed the kidney from before, back through the middle of its vertical diameter. The organ had much diminished in volume, and presented upon the centre of the two opposite surfaces a depressed cicatrix, fibrous and solid, and to which were joined, like the rays of a star, five other irregular cicatrices."

The treatment must consist in such measures as are most likely to prevent inflammation; the urine should be carefully withdrawn from the bladder whenever the urethra becomes clogged by the blood; the external wound should be kept well open, and the patient induced to repose in that position which will facilitate the discharge of urine by the wound. If the ball is lodged, or other foreign substances are supposed to have entered, it may be proper, in certain cases, to enlarge the wound, and make a careful search in order to their removal.

Original Communications.

CASE OF "SPOTTED FEVER."

By FREDERIC D. LENTE, M.D.,

OF COLD SPRING, N. Y.

I SEND you the following notes of a case of "spotted fever" which, besides being interesting *per se*, is the more so, as having occurred in the person of a medical man, who has had to describe his own sufferings to some extent. The history is somewhat incomplete, from the circumstance that the patient was more or less insensible during the inception of the attack, and not in a condition to give a very clear account of himself for some days after:

Dr. C., æt. 43, 40th Regt. N.Y.V., has always enjoyed fine health. Served two years, when his regiment re-enlisted, and he re-entered the army. Immediately after the second battle of Bull Run, was attacked with diarrhœa; was furloughed for two months and entirely recovered his wonted health, which he continued to enjoy until February last. At that time he was boarding at a hotel in New York, awaiting the embarkation of his regiment.

One day, soon after eating a hearty dinner, he was attacked with nausea and headache. He took no supper and went to bed, not feeling very ill. During the night, he got up, feeling feverish and thirsty, became dizzy, and was near falling. About eleven o'clock the next day some one knocked at his door and roused him; feeling very languid and stupid with headache, he paid no attention and relapsed into sleep. In the evening his Major and Adjutant knocked at the door. He thinks he heard and answered them; and from that time became totally unconscious. His friends soon came again, and getting no answer to their summons, entered the room through an opening above the door, and finding him in an alarming state, sent for two physicians, who applied remedies, among which were strong sinapisms to the nape of neck and spine, until near morning, when he must have been somewhat relieved, as they left him. He got up in the morning, feeling very weak with headache, mind confused, etc., but managed to dress himself and get into his Major's room. Happening to have a brother at a hydropathic establishment in the city, he went there. About the third day of the attack, that is, as soon as he could direct his attention to anything, he first noticed that his right eye was very red and vision entirely gone; but he had little or no pain in it, nor has there been any since.

He also observed that his whole body, except his face, was pretty thickly covered with purplish spots of an irregularly oval shape, varying in size from that of a pinhead to that of a three cent piece, or not quite so large; not raised above the level of the skin; also that his lower extremities, from the knees downwards, were very much tumefied and hard, the toes being wide apart; but there was no "pitting;" there was effusion into the knee-joints, especially the left, which was quite painful; the effusion was apparent only at the sides of the *patella*, not extending above; there was no redness. He had also pain in the lower lumbar and sacral region, extending around the crest of the *ilium*, principally on the left side and down the groin, along the course of the anterior crural nerve to the knee. Had no appetite for some time, taking only a little beef tea. Had a "bad taste;" did not notice his pulse or his tongue particularly, but thinks the latter was not dry, but only coated as is common with him. Urine normal in appearance; no cough. For a couple of weeks was much prostrated, and occasionally in a semi-delirious state. Noticed that he had a febrile movement every afternoon for a time, with great thirst.

Soon after he noticed the spots, they commenced to fade away, and in a few days had entirely disappeared. But those on the hands, the only ones exposed to the light, pursued a different course. They dried up and peeled off in thick, blackish scales, as of extravasated blood; looked like it, he says. The tumefaction of the limbs also disappeared gradually, except that of the knees. He kept his bed for four weeks, except when he was placed in the erect posture to receive the douche. At the end of that time he walked on crutches, and at the end of six weeks with a cane. As long as the febrile condition continued, the cold water treatment seemed to agree with him; but, subsequently, the skin assumed a cold and shrivelled aspect, and he left the establishment. He had then recovered his appetite, and he has been since slowly improving until a week ago, when he came to this place to try the baths and mineral water. He is drinking the Empire water, and under this and the baths, frictions, etc., he thinks he is slowly improving.

His present condition is this: His general appearance is that of good health. His usual weight is 165 lbs. He has lost 20 lbs. and regained 10 lbs. He still complains of the pains previously described, which are aggravated by walking a moderate distance, by standing, but especially by sitting. In the horizontal posture he "feels perfectly well." The arthritic effusion still exists in a moderate degree. It should have been previously mentioned that he applied the tincture of iodine freely to the seat of all the pains, with the aid of oiled silk around the knees; also had two blisters to the spine, but experienced little relief from them. There is now no swelling about the legs.

The most remarkable feature of the case at present is, the condition of the eye. Previous to his attack his eyes were equally good. The *conjunctiva* of the right is now very much injected; the globe very much shrunken and quite soft to the touch; the *cornea* hazy, more so at one time than at another; the pupil contracted and immovable; the lens cataractous; at the same time there are no unpleasant sensations about the eye, although morbid processes are apparently still going on.

SARATOGA SPRINGS, June 25th, 1864.

In a late discussion at the Parisian Surgical Society, on amputations, M. Broca observed that statistics proved little or nothing in the matter. Amputations made in Paris and in the provinces were followed by very different results. In the provinces, amputation of the thigh generally succeeds; but in Parisian hospitals, it is an operation of extreme danger, death being the rule and recovery from it the exception. Statistics, according to M. Broca, show that the mortality in Paris hospitals after amputation of the thigh for injuries is 100 per cent. ! Trélat makes it 83 in 100 cases.

ON THE CAUSE OF GOITRE.

By C. W. BRINK, M.D., A. A. SURG. U.S.A.

THERE are in etiological science many morbid questions, to settle which the profession must appeal to the future. One of the most interesting of these relates to the causation of goitre, much of which singular disease once came under my notice in South America.

By the natives of districts wherever it prevails throughout that continent, it is called "the papas;" and it sometimes grows to an enormous size, extending completely around the throat like an inflated life-preserver. The lower animals, as well as man, are sometimes affected with it; small goitrous tumors having been found even in foetal calves.

In connexion with this disease in the inferior animals, an entozoon is often found, which introduces itself between the cutaneous and subcutaneous areolar tissue, and produces large malignant tumors and death.

But with respect to the causation of bronchocele (to which it is the object of this communication to briefly allude), it is more easy to say—as of most other diseases—what is *not* than what is its cause, so many conflicting opinions have obscured its etiology.

It was Sanders, I believe, who first opposed the opinion that it is caused by the use of snow-water. I have seen it in places where such water was *never* used. It is true, however, that in localities where snow water is used, the lower classes, who drink that of an impure quality, are more subject to the disease than those who correct its impurities by filtering.

The only place in South America where I have witnessed cretinism accompanying bronchocele is in Gujui, in Bolivia, a town beautifully situated, remote from the mountains, and having none of the conditions, either of situation or other local circumstances, usually supposed to operate as causes of those diseases in Switzerland, England, and other infected localities.

Is it not, I would ask, therefore probable nay, certain, that goitre is engendered by other causes; that it depends neither upon the hydrology, the geology, nor the climatology of localities in which it is endemic?

There is a substance which abounds in both kingdoms of nature, that is contained in almost all natural bodies, and is always found where goitre prevails—I refer to *iodine*.

This agent acts (we are told by Pereira) "sometimes without any perceptible alteration in the functions of the body."

Lugol asserts that "it encourages growth and increase of size." That it stimulates the lymphatic glandular system is a universal opinion; and abundant experience has shown that extremely minute doses (especially when there is an idiosyncratic susceptibility to its operation) are sufficient to affect the system.

As I have already remarked, iodine is found in the inorganic as well as in the organic kingdoms in every country where goitre is known. Mineral springs upon the sides of the Andes and among the Alps, and many vegetables indigenous in goitrous countries, contain it.

Dr. Smith has shown that it abounds in fresh water plants; and Chatin, of the School of Pharmacy of Paris, in a paper read before the Academy of Sciences, stated that, in the course of investigation upon the subject of the prevalence of this element, he found iodine in horseradish and in others of the tetradymania. It also enters largely into the families of algæ, which abound in the beds of ancient seas, upon all continents, and also in the omni-prevalent fungi, some one or other variety of which is used as food or medicine in districts where the disease is found. In South America some of them have considerable reputation as remedies for the cure of the malady.

The source of the iodine in the goitrous regions of the great southern continent is the superficial saline deposits found in vast crusts on either side of the Andes; deposits which are, of course, of marine origin. The waters of most

of the streams east of the mountains in the Argentine Republic, flowing along the vast pampas, are brackish and saline.

The success of iodine in the cure of goitre has led us to infer that it is a sovereign remedy, if not a *specific*.

Now, if it affects the thyroid gland as a *curative*, may it not also act as a morbid agent? If, as we well know is the case, iodine operates as a stimulant to the glandular system, may it not produce the diseased conditions that it sometimes cures? To maintain that this is so, in the instance before us, is not to be guilty of homœopathy. Atrophy of the mammæ and testes are not unusual effects of this agent. May not hypertrophy and atrophy, though contrasting in some respects so strongly with each other, both be the result of *stimulation*; and the increase in one case, or wasting in the other, be the effect of the same agent? To stimulate absorption is to cause atrophy. To stimulate nutrition is to produce hypertrophy. Is not this the simple and true explanation of the apparently contradictory operation of this potent agent upon the animal economy? Can we not see in this hypothesis the true explanation of an obscure novel question in etiology?

These are interesting queries, and I would express the hope that they may be more fully examined by abler investigators.

The direction, it appears to me, that inquiry ought to take is, 1st, with respect to the function of the thyroid gland; for pathology and therapeutics, as well as etiological science, have their basis in correct physiology.

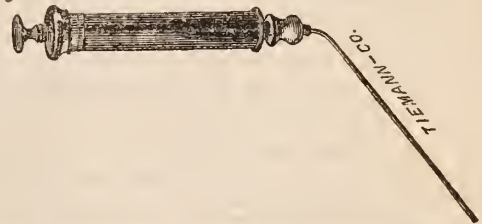
Whether the views I have expressed be correct or not, cannot perhaps at present be shown. Theories may be untrue and therefore valueless; but *facts* upon which they rest are of worth, and ought to be remembered.

LACHRYMAL PROBE SYRINGE.*

By E. MACFARLAN, M.D.

SURGEON TO THE NEW YORK OPHTHALMIC HOSPITAL.

THIS syringe is presented to those engaged in the practice of ophthalmic surgery as possessing an advantage over the Anel syringe, which at a single glance is apparent.



Anel's syringe must be introduced through the punctum lachrymale into the canaliculus, and then only small quantities of astringents in solution can reach the lachrymo-nasal duct; and although the canaliculus be laid open, yet the sharp point of the syringe cannot be introduced with safety to the sac, nor can it be passed beyond it into the nasal duct. The lachrymal probe syringe combines, as its name implies, the probe and syringe. The probe portion is of the same length and size as Bowman's No. 8 probe, and is bent at an angle with the syringe, so that the latter, if detached, may be conveniently screwed on; the probe, however, need not be detached, as it will pass through the laid open canaliculus just as readily by the dexterous surgeon, as when separated from the syringe; the introduction into the lachrymo-nasal duct being conducted in the same manner as when using Bowman's probes. The syringe does not press against the edge of the orbit, and the piston is easily managed by the operator.

The surgeon will find the probe syringe a most valuable assistant in completing the cure of mucocoele, lachrymal abscess, and fistula lachrymalis. It is not unfrequent that, after all strictures of the lachrymo-nasal duct have been

* The accompanying diagram is about one-fourth of the size of the lachrymal probe syringe, but gives a very correct idea of its construction.

removed, there will remain an obstinate and troublesome muco-purulent discharge, equally discouraging to patient and surgeon. If astringent injections can be thrown into the lachrymo-nasal duct so as to thoroughly wash the secreting surface, then a cure may be effected. The lachrymal probe syringe fully accomplishes this desired result; the patient being relieved of an exceedingly annoying disease, and the surgeon thereby adding to his reputation.

This instrument is manufactured by Tiemann & Co.; the probe is made of silver, and the syringe of hard rubber, holding about forty drops; the whole being small enough to place in a case made by Tiemann & Co. especially for such instruments as are used in Bowman's operation for obstructions of the lachrymal apparatus.

CASE OF

NECRÆMIA, PIARHÆMIA, GANGRENE, AND
GAS IN THE VEINS.

By S. FLEET SPEIR, M.D.,

BROOKLYN, L.I.

PATRICK WRIGHT, æt. 44 years, of good constitution. Admitted to Brooklyn City Hospital Oct. 6, 1863, for compound comminuted fracture of the leg. Service of Dr. J. M. Minor.

The patient was engaged hoisting sugar, when a slack hawser, suddenly made taut, struck his left leg in its upper third, producing extensive comminution of the bones, and laceration of the soft parts. Amputation was advised, but the patient refused to have it performed. On the 7th he desired amputation, and at twelve o'clock M. Dr. Minor amputated at the "place of election," and the patient rallied pretty well after the operation. Three hours after amputation pulse 114 and feeble; skin cool and face pallid; patient inclined to sleep. Ordered whiskey and beef-tea. Oct. 8th.—There was a dark discoloration of the thigh on its posterior aspect; at ten A.M. pulse 108 and quick. Oct. 9th.—Considerable sloughing of the stump, and the discoloration on the back of the thigh pits on pressure; the veins are much dilated and prominent; resonant percussion extending up the thigh of the affected limb. At ten A.M. pulse 90, feeble; skin moist; patient had two chills, one at two P.M. and another at ten P.M.; had more or less delirium during the day; would start up and desire to go home. Oct. 10th.—Was delirious and uneasy; much excited during the afternoon and evening. At half-past eight P.M., after one of his periods of excitement, he fell back and died in a few minutes.

Oct. 11.—*Post-mortem examination, 15 hours after death.*—Body well formed; rigor mortis not well pronounced; The body was everywhere more or less resonant on percussion, due to the distension of the veins by gas, a large collection of which had accumulated in the superficial veins, giving them great prominence. A part of the cephalic vein was tied at two points, and removed with its contained gas, after which the distension of most of the veins in the neighborhood disappeared. The stump presented a bloated, gangrenous appearance, and on being opened, foul gas and ill-conditioned matter escaped. *Thorax.*—Lungs normal; heart eleven ounces, flabby; the veins upon its surface were distended with gas; clots in both sides of the heart. The blood contained in the blood-vessels was fluid and foamy, from the development of gas; it had a peculiar carmine color, and was loaded with oil. In the heart and large vessels the blood separated into two distinct portions, the supernatant layer consisting of clear, yellow oil, and the subjacent portion presenting the appearance of fluid venous blood, of a lighter color than usual. From a rough examination, it was thought that about one-fourth part of the liquid contents of the veins consisted of oil. The liver weighed four pounds eight ounces, and was waxy; gall-bladder contained black bile. The kidneys weighed four and a half and six ounces,

waxy; in one of them was a small cyst containing a yellowish fluid. Spleen weighed five ounces; appeared healthy. Upon microscopical examination, the liver and kidneys were found to be waxy; the other organs were normal. *Blood.*—The blood contained granules of læmatoidine; its corpuscles were larger than usual; colorless corpuscles with one, two, and three nuclei, were abundant; the greater part of the field was covered with crystals of margarine, stearine, and free oil globules. On adding ether to a portion of the blood, the oil was entirely dissolved.

From a cursory examination, one would be inclined to consider this as a case of ordinary gangrene attacking the stump; but, after a more thorough investigation its pathology is found not to be so readily arrived at, and it proves to be a case of more than ordinary interest, and worthy of further consideration. The most striking features of the case are, mortification, and the occurrence of gas and oil in the bloodvessels. Mortification of itself is not uncommon after severe injuries and operations, especially nowadays. Neither is the collection of gas in the bloodvessels or connective tissue rare in such cases, but I believe the presence of so large a quantity of oil in the blood, constituting a true pathological piarhæmia, is very rare under any circumstances, and the occurrence of these three conditions together is still more remarkable.

I conceive of two ways of solving the pathology of this case. First, by considering mortification, caused by a loss of vitality in the tissues of the injured limb, from the shock of the injury, from inflammation or otherwise, as the first of the train of accidents occurring after the infliction of the injury; this was soon followed by the generation of gas, from decomposition going on in the mortified parts; the gas being carried into the circulation through the medium of the veins, produced decomposition of the blood—piarhæmia and necræmia.

Or, secondly, to look upon the shock from the accident, from the operation, or both, as producing primarily a disorganization of the blood. According to this theory we shall have the order reversed; first necræmia, and as a consequence, the generation of gas in the bloodvessels from decomposition of the blood itself; then follows piarhæmia, and lastly gangrene. Comparing them in order, we have, according to the first, mortification, generation of gas (from the tissues), piarhæmia, and necræmia. In the second, necræmia, generation of gas (from the blood), piarhæmia, and mortification.

In accordance with the microscopical examination of the blood, and from the fact of the gas being observed to occur first in the veins, and only secondarily and but slightly affecting the connective tissue, I conclude that the latter theory is correct, and explains the true pathology of this case; in fact, "death began with the blood," and the other conditions followed as necessary results. The cause of the disorganization of the blood, I think, must be attributed to the shock—either from the injury or from the amputation. Among the causes of necræmia, German pathologists mention violent convulsions, overwhelming emotions, the shock from an amputation, a stroke of lightning, and even a severe exhausting labor. The shock, then, was quite sufficient to account for the death of the blood. This being admitted, we can readily understand how gas may be generated by the decomposing blood, and thus account for its accumulation in the bloodvessels. It is not so easy, however, to account for the occurrence of piarhæmia.

We are all aware of the physiological piarhæmia, the result of digestion, pregnancy, lactation, and hybernation. About two hours after the ingestion of aliment the serum is found to be turbid, opalescent, and semi-opaque, a transitory condition which is due to the absorption of the fatty matters of the food formed into an emulsion by the pancreatic juice, and absorbed as such in the duodenum. The microscope shows this condition to be due to the presence of a large number of fat globules and of molecular granules of albumen. According to Christison, the passage

of the chyle into the blood renders the serum turbid; this turbidity lasting until the insoluble fatty matters, oleine, stearine, and margarine, enter into combination with the free soda of the blood, and become converted into oleic, stearic, and margaric acids. That the case under consideration was not a case of *physiological piarhæmia* is evident from the fact of the patients having taken very little food for some time, as well as from the absence of the peculiar lactescent appearance of the serum usual in such cases. There is, however, a *pathological piarhæmia*, the result of certain diseases. It has been noted in diabetes, chronic alcoholism, dropsy, jaundice, nephritis, hepatitis, pneumonia, and especially Bright's disease.

Various explanations have been given of the occurrence of fatty blood in disease. Dr. Babington regards *piarhæmia* as a fatty degeneration of the albumen of the blood. Rokitansky thinks it is often due to fatty degeneration of the colorless corpuscles, which are previously formed in excess, so that it is to be regarded as a modification of leucocythæmia; but he also admits the direct introduction of fat into the blood, and the liberation of combined fat contained in it, to be possible causes. Virchow regards it as dependent upon the non-combustion of fat, and its consequent accumulation in the blood; while he considers the presence of molecular albumen to be only a secondary phenomenon, the slow saponification of the excess of fat abstracting from the albumen of the blood the alkali required to keep the latter in solution. These explanations are all plausible, and may each be applicable in some instances; but in the case before us, the microscopical examination would not warrant us in supposing that any of the constituents of the blood were undergoing fatty degeneration. I think Raspail gives the explanation most applicable to this case. He maintains that fat is set free in the blood for want of a free alkali to hold it in the form of a soap. The fatty matters may have entered into the blood along with the chyle through the thoracic duct, or it may have been elaborated in, and absorbed directly from, the liver; in either case it is very probable, from its present appearance, that some of it at least was once in combination with the alkali of the blood.

In consideration of the facts elicited by this examination, I present this as a case of *necræmia* from shock.

112 MONTAGUE PLACE, BROOKLYN, L.I.

Reports of Hospitals.

U.S. GENERAL HOSPITAL, CHRISTIAN STREET,
PHILADELPHIA.

REPORT ON REFLEX PARALYSIS,

By S. WEIR MITCHELL, M.D.; GEO. R. MOREHOUSE, M.D.; and WM.
W. KEEN, JR., M.D.

(Concluded from page 7.)

RELATION OF THE SEAT OF THE WOUND TO THE PART OR
PARTS PARALYSED.

CASE I.—The wound involved the muscles of the neck or throat, and the hyoid bone. *Result*.—Paralysis of both arms and of the neck.

CASE II.—Fragment of shell; wound of muscles over and external to the right femoral artery. The injury may have caused concussion of the crural nerves, and thus much of traumatic paralysis. *Result*.—Reflected paralysis of the right arm and leg, and the left leg.

CASE III.—Probable injury of the sciatic nerve (compression). *Result*.—Reflex paralysis of the right arm.

CASE IV.—Ball wound of right testicle; paralysis of right anterior tibial muscles and peroneus longus.

CASE V.—Wound by fragment of shell in external side of left thigh; paralysis of tact on a corresponding part of right thigh.

CASE VI.—Ball wound, probably involving the crural nerves. *Result*.—Paralysis of right arm.

CASE VII.—Ball wound of deltoid muscle; sensory and slight motor paralysis of same arm.

There is no evidence in this case that the ball struck the bone or directly injured any large nerves, since even the deltoid itself had nearly full power when the patient was first examined by us. In three of these cases the leg was hit, and the arm of the same side was paralysed. In three cases the paralysis affected the opposite side of the body, and in one the paralysis of tact and pain was observed to have fallen upon a space symmetrically related to the wounded spot as regards position. No general law, therefore, can be deduced from these records, nor from what we see in the causation of reflex paralysis from disease should we expect to find any inevitable relation between the part injured and the consequent paralysis. The constitutional condition at the time of the wounding, as to excitement, mental and physical, may possibly have to do with causing the resultant paralysis. Of the seven cases above reported, two were in active movement, two were standing about taking aim, one was kneeling, and of two we have no information as to this point. It may prove, upon examining a larger number of cases, that a man wounded when moving violently, or when excited, is more than another liable to reflex paralysis, but as yet we are not entitled to such an inference. In most of our cases the constitutional effects were instant and severe, and could not therefore have been due to the loss of blood, which in some of them was copious. Four of the seven cases had stinging, smarting, or burning pain in the part paralysed reflectively. The pain was an early symptom, which disappeared in all of them after a time. In three cases no such pains were complained of. The after history of these cases is extremely curious. However grave the lesion of motion or sensation, it grew better early in the case, and continued to improve until the part had nearly recovered all its normal powers. In almost every instance some relic of the paralysis remained, even after eighteen months or more from the date of wounding. In some the part remained weak, in others there was still left some slight loss of sensibility, and in two the loss of power and of sensory appreciation was very considerable. In a case of reflex paralysis from a wound we have, therefore, some right to expect that the patient will recover rapidly up to a certain point; then in most cases a small amount of loss of power or sensation may remain. The future history of our own or other cases may determine hereafter whether the recovery is ever quite complete.

In Case I., the more prominent results were only the continued lesions which had been noted early in the case. In Case II. the permanent lesions were chiefly of secondary character, and were at all events additions to those which were first observed. In no other case were similar phenomena noticed. In two of the seven cases there were lesions of sensation and motion. In three, motion alone was lost, and in two the senses of tact and of pain were affected without other loss of function. The extent and duration of the induced paralysis have already been considered.

Of the treatment we have very little to say. In Captain STENBEL's case the left arm recovered without treatment in four weeks, leaving only a slight loss of touch in the terminal distribution of the ulnar nerve. The right arm, which we also regard as reflectively paralysed, recovered sensation early, but was useless as to motion, until it was treated and cured by faradization, eighteen months after it was first injured.

DEMMUTH, Case II., came under our care seven months after he was wounded; as to his previous treatment we know nothing. In our hands strychnia not only failed to aid him, but did harm. He was rapidly relieved by faradization, active and passive movement, and the douche, with iron, quinine, and liberal diet.

ARMLIN, Case III., used a liniment on the paralysed arm, with some improvement. Faradization has restored it completely.

Case IV.—Relieved by faradization.

Case V.—No treatment; lesion of sensation only.

Case VI.—KENT. A stimulating liniment applied upon the arm seems to have been of use. As in Case III., the employment of crutches caused a relapse.

Case VII. seems to have been accidentally benefited through the blistering to which the arm was subjected after exposure to the sun—a useful hint in like cases. No other treatment was employed.

Although long periods had elapsed in every case before we examined them, in only one, that of ARMLIN, Case III., was there any very notable wasting; and even in this patient the loss was generally throughout the member, and may be readily ascribed to mere lack of use. In none was there atrophy, such as characterizes lesions of nerves, and certain rheumatic and other palsies, save, perhaps, in the doubtful instance of the right arm in Case I.

The electric examination was made at periods so variable in the several cases, as not to permit of any useful comparison of results, and has been stated in each case merely for future use and reference when more cases have been reported. In only one case did the muscles display great loss of contractility when faradized; and in this, No. 1 of the series, the limb in question was the right arm, as to which alone some doubt may exist concerning the cause of paralysis. The ultimate causation of these very singular and hitherto undescribed affections is the last point which we shall consider. The problem before us may be simply and briefly stated; its solution is a task less easy.

A gunshot wound occurs, involving large nerves or not, and we have instantly a paralysis of motion and sensation, or of either alone, in some part of the body more or less remote. How shall we explain this? Although we have long been aware that certain forms of disease are capable of causing paralysis of distant organs, of altering secretions and affecting nutrition, we have had no plausible theory of the causation of these effects until M. BROWN-SÉQUARD attempted to account for them in a manner equally simple and ingenious. Recalling the fact that irritation of the vaso-motor nerves is capable of producing contraction of the bloodvessels, he inferred that when an external nerve is violently or permanently excited, it may be able to produce contraction of the capillary vessels of the nerve centres, and thus give rise to paralysis. It seems unlikely, even if we admit his explanation, that the capillaries could remain contracted for any great length of time. But it is possible that the alteration of nutrition, which this temporary anemia causes, may give rise to one of two results—either a continued disturbance of nutrition, which, however slight, would occasion grave results if it existed in a nerve centre, or secondly, to a paralysis of the capillaries of the nerve centre involved.

We suppose, first, the existence of an exterior nerve lesion; secondly, a consequent irritation of the vaso-motor nerves in a limited part of the spine; contraction of its capillaries, anæmia, nutritive changes, and finally, a relaxation of the vessels, which would be more apt to be a lasting condition, and would in fact constitute congestion. Such a series of consequences may very possibly occur, and would no doubt be competent to cause a paralysis, whose site, extent, and character would depend upon the part of the nerve centres affected by the excitation. With so satisfactory a hypothesis before us in this modified shape, it would seem needless even to suggest any other explanation. But in a region of research so little explored, it may be allowable to point out the fact, that another mode of explanation is at least possible, and the more so since there exist certain objections to M. BROWN-SÉQUARD's manner of viewing the subject.

It is to our minds improbable that contraction of the capillaries can continue for any great length of time. There is no experiment on record to show that this can be, or that it ever occurs in a nerve centre. We have therefore added the suggestion of consequent, and why may we not say primary, paralysis of these vessels. Here we have firmer

ground for opinion, since it has been most distinctly shown that in section of the sympathetic nerve this result does take place, and is singularly persistent. But whether the bloodvessels remain contracted or dilated, nutritive changes would occur, and these the pathologist has failed to find. If now we ask ourselves the question, whether it may be possible to blight or exhaust utterly the power of a nerve centre, without the intervening mechanism of contracted or dilated bloodvessels, we are tempted to think that such a result may be producible.

It appears to us possible that a very severe injury of a part may be competent so to exhaust the irritability of the nerve centres, as to give rise to loss of function, which might prove more or less permanent. A strong electric current, frequently interrupted, is certainly able to cause such a result in a nerve trunk, while a general electric shock, as a stroke of lightning, is, as we well know, quite competent to destroy the irritability of every excitable tissue in the economy. Now if the former of these results can occur in a nerve so insulated, as practically to have no circulation, the loss of irritability cannot be set down as due in such a case to a defect of circulation. Reflecting then upon the close correlation of the electrical and neural force, it does not seem improbable that a violent excitement of a nerve trunk should be able to exhaust completely the power of its connected nerve centre. The central change thus brought about would no doubt involve the consequent or immediate occurrence of chemical nutritive changes, which would gradually yield as time went on. While this view seems to us adequate to explain the facts, the notion of vaso-motor irritation and capillary contraction (BROWN-SÉQUARD) does not appear to be competent to cover all the facts.

We have pointed out that no one has ever shown that capillary contraction can exist as a permanent state in a nerve centre, while, on the other hand, it has been proved that section of a sympathetic nerve involves permanent dilatation of bloodvessels; but in the brain, which is supplied by the sympathetic of the neck, division of this nerve gives rise to no disturbance, although the side of the brain on which the section occurs grows warmer. However, it is probable that the whole supply of vaso-motor nerves to the brain does not come from the neck, while other organs, whose whole supply we can cut off, as the kidneys, do certainly suffer nutritive changes as a consequence of such sections.

One or other of the two theories we have offered must therefore be called on to explain the central changes which give rise to reflex paralysis. Either the shock of a wound destroys directly the vital power of a nerve centre, or it causes paralysis of the vaso-motor nerves of the centre, with consequent congestion and secondary alterations. But there is no reason why, if shock be competent to destroy vitality in vaso-motor nerves or centres, it should be incompetent so to affect the centres of motion or sensation. Until the causation of these cases is better understood, it is vain to speak confidently as to treatment founded on a conception of the mode of their production. Experience has shown that the removal of the first cause, and in some instances the application of alteratives, as blisters to the cicatrix, prove valuable in relieving such induced pain as may exist. Further, that stimulating liniments or blisters to the affected member are useful, and that the local application of induced electric currents to the muscles is of the utmost service.

The question of the use of internal remedies has yet to be decided by larger clinical experience. We ourselves have been unfortunate, in that no chances have presented themselves of treating these cases in their early stages, when the causes which first produce the paralysis are present and before those later nutritive changes occur which, as we presume, are essential to the continued existence of the state of palsy. We have endeavored to show in this report that the condition called shock is of the nature of a paralysis from exhaustion of nerve force; that it may affect

one or many nerve centres; and finally, that it may be so severe as to give rise in certain cases to permanent central nerve changes, productive of paralysis of sensation and motion, or of either alone.

U. S. GENERAL HOSPITAL,
CHRISTIAN ST., PHILADELPHIA, PENN.,
February 15, 1864.

BELLEVUE HOSPITAL.

GANGRENE AFTER A FALL.

T. M., æt. 50, admitted April 15th, 1864. He stated that on the 11th inst. he fell from a scaffold twenty feet high, alighting upon the tuberosities of the ischiatic bones, the thighs being flexed upon the pelvis as in the sitting posture. He was unable to rise, was carried to a house, but recovered sufficiently to walk home on the 14th, a distance of about two miles.

On admission the pulse was about 90, and of tolerable strength; the scrotum was very much swollen and gangrenous; the perinæum also distended and in a state of incipient gangrene; the inner aspect of the thighs for several inches downwards was discolored as if from inflammatory action. The patient stated that the swelling and discoloration of the scrotum began the day after the fall. The abdomen was tympanitic, and the surface of the body from the pelvis up to the sternum was emphysematous. He had voided the bladder just before the fall, but had passed neither urine nor feces since (a period of four days), and complained of pain over the hypogastrium. A catheter was passed and the bladder relieved of about four ounces of high-colored urine. Supposing the urethra to be ruptured, and that the sphacelus and swelling of the scrotum and perinæum were due to the infiltration of urine, free incisions were at once made into the gangrenous tissues, whereupon an offensive gas escaped, and the tumefaction of the parts subsided. Anti-septic poultices were applied and measures taken to meet the indications of the case; but the patient sank, and died early the next morning of asthenia.

Coroner's Inquisition Eight Hours after Death.—Upon making the first incision on the median line from over the sternum to the pubes, the same fetid gas was observed to escape from the bloated areolar tissue as when the scrotum was incised during life. The subcutaneous areolar tissue from the pubes to the umbilicus was black and gangrenous, and from the umbilicus gradually shaded off to an ash color as high as the middle of the sternum. A transverse incision, just above the crests of the iliac bones, discovered the same condition. The abdominal muscles were healthy; the cavity of the peritonæum perfectly normal. The bladder and urethra were next carefully dissected out and examined; but both were found to be intact; no rupture nor any departure from the healthy appearance could be detected. The kidneys were moderately congested; no smell of urine could be recognised in the gangrenous parts. And now that our attention was directed to this point, we recollected that none had been present before death. All present were thoroughly satisfied that no extravasation of urine had occurred. There was no fracture of any of the pelvic bones; but the superficial fascia about the pelvis was gangrenous, like the abdominal portion already described. This we conceive to be a case of gangrene produced by mechanical violence. The dependent scrotum received at the fall an injury that destroyed the vitality of its tissues; and the blood extravasated into these tissues, together with the parts themselves, rapidly underwent decomposition, evolving aerial gases which diffused themselves through the areolar tissues, occasioning the emphysema and death which has been described.

This case is peculiar and instructive, and has excited no small degree of interest and investigation at the hospital; it is of interest as to diagnosis. A vigorous laboring man presenting himself with a scrotum and perinæum enlarged and gangrenous, stating that he had fallen twenty feet four days before, and had passed no water since, would naturally enough lead one to suspect extravasation of urine.

But in this instance there were facts present amply sufficient to correct or render doubtful such a diagnosis, had they been properly appreciated. First, of all the urinary apparatus, the bladder is the only viscus which, from the character of the accident, would be liable to rupture; but that this had not happened was apparent from the absence of peritoneal symptoms. Moreover, extravasation of urine in the scrotum and perinæum could only occur as the consequence of a rupture of the urethra anterior to or between the layers of the triangular ligament; therefore if the swelling of these parts had been due to the presence of urine, it must have escaped through the urethra. Now it is difficult, if not impossible, to suppose that the urethra could be ruptured by such a fall as this man sustained, and that, too, with an empty bladder, without a fracture of the pubic bones; add to this the entire absence of urinous odor about the parts, and it will appear that our diagnosis was unwarrantable. For this symptom is invariably present and pathognomonic whenever the infiltration is in the superficial tissues. It is remarkable that a man should secrete no urine for a period of more than four days and have no uræmic symptoms; but such cases have often occurred, and our attention was lately called to the record of a case in which no urine had been secreted for twelve days, without any of the symptoms of uræmic intoxication.

American Medical Times.

SATURDAY, JULY 9, 1864.

MEDICAL AND SURGICAL HISTORY OF THE WAR.

In a previous issue we called attention to the Army Medical Museum at Washington, for the purpose of extending a knowledge of this great collection of material illustrative of military medicine and surgery in the profession at large. Another great national work, projected and prosecuted by the medical department, of equal importance, and of which the profession have also too little information, is the Medical and Surgical History of the War. In the earlier period of this great undertaking we took occasion to allude to it as a work which, in its design and scope, was in the highest degree creditable to the Department. But to-day we may speak of the realization of our former anticipations, for the ripening fruits begin to appear, and give abundant promise of the approaching harvest. We shall perform a pleasant service if, by any word of explanation, we can lead the profession to a due appreciation of the value of the efforts of the Medical Department to utilize the rapidly accumulating material illustrative of the surgery of the war, and to embody in proper form for future study the experience of the large and intelligent corps of medical observers now under its direction.

The Medical and Surgical History of the War, like the Army Medical Museum, was projected by SURG.-GEN. HAMMOND, and during his active official career was constantly fostered by his personal supervision. Nor has ACT. SURG.-GEN. BARNES allowed the work to languish, but has steadily prosecuted it, and with commendable vigor.

The Surgical History was assigned to SURGEON J. H. BRINTON, U.S.V. DR. BRINTON was formerly a successful teacher of anatomy and surgery at Philadelphia, and was well adapted by previous study for the work of organizing, perfecting, and executing the plan of obtaining the current

materials and reducing them to proper form for ultimate publication. After two years of unceasing activity in the prosecution of his arduous undertaking, such progress has been made as to render it certain that this work will excel in true scientific merit all similar publications. There is no point in military surgery that will not be thoroughly discussed, and with such ample material that the deductions will be based on the most accurate and often repeated observations. The materials for such a work are, indeed, furnished in the greatest profusion. From every battlefield and from every hospital come daily voluminous reports upon every variety of subject, and all will finally find their appropriate places in this well digested historical resumé of the surgery of the most destructive war in the world's history. The work will be illustrated on a scale of magnificence fully in keeping with its scientific character. The artist, Mr. STAUCH, sketches with great effect the various subjects illustrating this department. The position and character of wounds in various parts of the body, the morbid appearances which gunshot wounds of internal organs present, the pathological changes which follow, etc., etc., are carefully represented.

The Medical History of the war is equally advanced with the Surgical. It is under the immediate direction of ASSISTANT SURGEON WOODWARD, who is ably assisted in his microscopical studies by DR. CURTIS. DR. WOODWARD is peculiarly fitted for the difficult and responsible task for which SURG.-GEN. HAMMOND, with his accustomed sagacity, selected him. He was qualified for the work by a practical familiarity with microscopy, and by a minute and extensive knowledge of histology and morbid anatomy. He evidently entered upon his duties with the zeal and enthusiasm of a true lover of science. He has not rested satisfied with the mere collating and editing the reports forwarded to his bureau, but has undertaken, and is now successfully prosecuting, most thorough and extensive histological and pathological researches destined to throw great light upon many obscure and disputed points. Every important subject which is presented by the reports from the army is carefully investigated, and such notes and emendations are made as are necessary to its proper elucidation. The microscope is used with great effect in the analysis of pathological changes. Mounted preparations beautifully show the progress of disease through its various stages. By a process discovered here, microscopical specimens are so prepared as to exhibit to the naked eye many of the outlines hitherto undetectable except by the aided vision. The illustrations of morbid anatomy are by MR. FABER, and it is but well merited praise to state that they equal in accuracy of coloring LEBERT's unrivalled work. There is a delicacy of shading which we have never before witnessed in the sketches of morbid anatomy. We have heretofore failed to find in this country an artist who had the peculiar faculty of coloring the varied and peculiar shades of diseased structures. In MR. FABER we have the long-sought genius, and we hope he will not be allowed to divert his talent to any other occupation.

In this brief and imperfect notice, we have attempted little else than to call the attention of the profession to this work of medical science and art which is gradually taking form under the plastic hands of DRs. BRINTON and WOODWARD. It will, when completed, be a monument to the industry and science of its authors, and a lasting honor to the Medical Department under whose auspices it was

designed, has been prosecuted, and will be completed. We urge every medical man who visits Washington to examine the Army Medical Museum and the Medical and Surgical History of the War. He will not only be repaid by the instruction which it will afford, but he will be qualified to estimate the magnitude and importance of the work.

SILK VS. SILVER WIRE.

DR. SIMS, who used the silver wire with such success, claimed that it was the great discovery of the age in surgery. It has not as yet, however, overcome the old-fashioned silk ligature in high professional circles. MR. FERGUSON, in his lectures "On the Progress of Anatomy and Surgery during the Present Century," holds the following language:—

"In speaking of wounds, I should not be doing justice to my own views and experience, nor to the efforts of others, were I to omit reference to the more common use of stitches than was sanctioned some thirty or forty years ago. When early and perfect union is desired in a line of considerable length, they far surpass other methods, and when judiciously applied (possibly in many instances with a due share of additional support) they are of the utmost value. Throughout my experience I cannot say that I have seen the slightest evil arise from them, whilst the best possible good has often been derived. In fact, some of the greatest triumphs of modern surgery are associated with this simple mechanical process; for how else could so much have been done with those vesico-vaginal fistulae which so baffled our forefathers, and are now so amenable to skilful operative management? How else could the operation for cleft palate have been successfully accomplished? How else could we have dared to lay open the walls of the abdomen to the extent of six, twelve, or fifteen inches? Much has been said in recent times of the superiority of the wire over thread as the material for the suture; but for my own part I deem the subject of comparatively little importance, whilst I do not hesitate to proclaim my preference of common silk thread for general use."

FEVER AND SMALL-POX HOSPITALS FOR QUARANTINE.

THE Commissioners of Emigration are about to erect a fever and a small-pox hospital for emigrants suffering from these diseases. This is a wise measure, and ought to have been adopted many years ago. The inconvenience which emigrants have suffered from the want of proper care has at some periods been excessive. The Commissioners of Public Charities and Correction have recently demonstrated, by the isolation of fever patients, the great importance of separate hospitals for their treatment. All fever patients applying for admission to these institutions are now placed in tents upon Blackwell's Island. The result has thus far been most satisfactory. The mortality has been reduced one-half, and the spread of the disease to attendants and patients sick of other diseases has ceased. The question of the location and construction of this fever hospital is of prime importance. No one at all familiar with typhus will doubt that the location should be removed from the immediate vicinity of all human habitations, and in its construction the greatest amount of ventilation should be secured. The Commissioners of Emigration have ample grounds on Ward's Island for the proper isolation of this hospital. We are glad to notice that MR. DRAPER, President of the Commissioners of Public Charities, who has had the largest opportunities for familiarity with the workings of our charitable institutions, is in consultation with the Commissioners of Emigration.

Reviews.

THE MEDICAL REGISTER OF THE CITY OF NEW YORK, for the year 1864. By GUIDO FURMAN, M.D. New York: 1864. pp. 204.

THE MEDICAL REGISTER is a continuation of the work projected by the late DR. TUCKER, the first volume of which appeared in 1862. It is well known that this able scientific statistician intended to issue the work annually, giving to it somewhat the form and importance of Valentine's Manual. With the untimely and lamented death of the author the work ceased, until revived by DR. FURMAN. The present volume is full of interest to the New York physician, as it contains all the medical statistics of the city. It opens with a calendar, in which the days of meeting of all the medical societies are regularly arranged throughout the year. This is followed by a full account of the organization of the American Medical Association, its regulations, its officers, and its code of ethics; next of the New York State Medical Society; and finally of all the local societies of the city—of the colleges, dispensaries, etc., etc. It closes with a carefully prepared register of all the physicians of the city, noting their residences, office hours; of the graduates of the College of Pharmacy, and finally of the qualified nurses, collectors, etc. The profession of New York is under great obligations to DR. FURMAN and his co-laborers for undertaking the reproduction of this valuable serial, and we trust it will give them its hearty patronage.

Correspondence.

SPECIALTIES IN MEDICINE.

(To the Editor of the AMERICAN MEDICAL TIMES.)

THIS subject, to which the attention of the profession is directed with increasing interest, and of which formal notice was taken in the recent meeting of the American Medical Association, by the appointment of a Committee for its consideration, I propose to discuss under the following heads:

Is the practice of limited departments of medicine, to the exclusion of other portions of it, justifiable? Is it necessary? Does it confer valuable benefits upon the community and upon the profession?

Secondly.—What should be the position and qualifications of the special practitioner?

Thirdly.—What are his true relations, and what his proper attitude, to the whole profession and to the community?

First, in the general topic—Is a physician justified in refusing to practise medicine as a whole, and in assuming only such parts as he may choose? The answer to this question must be fully made under succeeding heads. If he look upon his art simply as a vocation or as a department of the useful arts, he has a clear right to select such portion of it as may please him best or be to his greatest advantage, or which he may deem most useful; the same right that a merchant has to confine himself to the sale of ribbons, or a carpenter to the manufacture of nothing but packing-boxes. This view of the matter is from a point which, it cannot be denied, some men among us selfishly, unscrupulously take. It is not the attitude of an honorable practitioner; it belongs to the heartless, gain-seeking empiric. But searching among high-minded men, and looking to a kindred profession, do we find in the ranks of lawyers subdivisions in action and practice? Undoubtedly. Witness the commercial lawyer, the man profound in international law, the real estate lawyer, the criminal lawyer, the lawyer in cases of patents. These are esteemed worthy subjects for individual and exclusive study and prac-

tice; and though the member of the bar be not technically called a specialist, it is evident that he is virtually such. But has well recognised custom authorized such a segregation of functions in the history of the medical art? It has. How long has the distinction obtained in Great Britain of styling the surgeon *Mr. Ferguson*, the physician *Dr. Laycock*. The former totally declines attending to the duties of the latter, and this one never pretends to meddle with the bistoury. But is this anything else than establishing a specialty? It is drawing only one partition line across the great field; but when laid down, what can be fairly objected to subdividing these moieties, if necessity for it shall exist? *Dentists* have long been counted special practitioners in the healing art, and no one regards them as traitorous secessionists from the body of the profession; they are rather a distinguished regiment in the grand army. They have grown to be so respectable both in numbers and skill, that they now are almost wholly isolated in *intercourse* from the rest of the medical profession. They are none the less most valuable ministers to the ailing body, yet "specialists." Established and honored custom can therefore be quoted in favor of "specialties."

Can the plea of necessity be urged, and that great advantages are gained by making further divisions in the great field of labor?

Herein rests the strong point of the case. The realm of medical knowledge has so greatly enlarged, it stretches over regions so vast, whose resources are so prolific, that no man can perfectly acquaint himself with all its territory except by spending so large a portion of his life in its exploration that he must verge closely upon old age ere he comes to apply his knowledge to practice. Our medical students would always be honored with grey hairs, the reproach of "young doctors" would cease, and the misfortunes of poor doctors be almost unknown. What man can embrace all the facts of physiology, of pathology, of morbid anatomy, both to the naked eye and as shown by the microscope? How master all of symptomatology? acquire the skill of hand, the coolness of nerve, to perform delicate and critical surgical operations? learn the laws of optics to penetrate the mysteries of sight? understand acoustics and their application in the hidden chambers of the ear? digest the multifarious phases of diseases of the skin? follow with unerring skill the protean virus of syphilis?—a wearisome catalogue in the mere enumeration. These are the applied parts of medicine; they relate immediately to disease and its cure. Can a man conscientiously and skilfully practice all of medicine who knows but a fraction of it? Does he not labor under constant embarrassment; does he not with self-reproach often confess his disastrous ignorance? These are undoubtedly the trials of the best men who have labored faithfully to qualify themselves for their high duties, and whom circumstances compel to accept the heavy responsibilities of general practice.

But I have alluded only to the immediate branches of medical science; think of those bearing more indirectly upon it, but which have been most potent means of advancing the other departments. What has chemistry done for medicine, in physiology, in therapeutics, in pathology? comparative anatomy and physiology in elucidating the wonders of the human frame, the microscope in revealing the minute forms of the vegetable and animal kingdoms which cause parasitic and perhaps zymotic diseases—the laws of physics, what have all these done? These are sciences kindred to medicine. To pursue them with advantage to the practice of medicine, a man must first qualify himself as doctor of medicine, and then abandon practice to become strictly a scientific chemist or physiologist, a microscopist or a physicist; in other words, he turns "specialist."

Does any one reproach him? On the contrary, the argument vindicates the absolute necessity of special devotion to a small field if one would bring out fresh fruits and new discoveries in scientific medicine. This is also the fact in practical medicine. Science and its application cannot be

divorced from each other in the medical practitioner. The facts of science must be understood in all their bearings before they can be utilized for the cure of suffering. As these facts multiply, their application becomes more complex and their acquisition more laborious. The senses need cultivation before they can appreciate many facts. The respiratory sounds in all their varied significance fall on the untrained ear too often only to confuse the mind or to lead to wrong conclusions. The revelations of the ophthalmoscope are a dim distorted maze to the eye unused to detect optical illusions, and unable to appreciate delicate shades of color, elevation, and distance. How old and proverbial has become the phrase "*tactus cruditus*." The obstetrician needs it, the surgeon daily relies upon it, the general practitioner knows its value when eliciting sounds which shall discriminate a solid tumor, a liquid effusion, or the presence of air. But the *learned touch* by which the surgeon knows the presence of pus does not serve the obstetrician. Each must educate his own fingers, and spend not a few years in perfecting their training.

It seems to me, then, indisputable that for progress in medical science and perfection in medical art, a subdivision in labor must be made.

No man would take the only alternative and say, we need not aim at perfection in medical science and art. We yet are far below this level; we have striven to cultivate too large a field; our agriculture has been the scratching of the surface, not the deep-drawn furrows; our crops have as yet been puny, with better culture they will yield manifold more to afflicted humanity.

But with all our endeavors at perfection, the most of medical men will be general practitioners. The circumstances of population and the impossibility of securing a competence from special practice, except in large towns or cities, will require the greater number of medical men to furnish themselves, as best they may, with the great and vital facts of medicine, and apply them to the best of their ability. Nor would I belittle the value of their contributions to medical knowledge. The sagacity which seizes the central fact, which at a glance understands all the morbid physiognomy, brings blessings and health to the sick, and teaches others how a zealous mind can break over difficulties.

But in dense populations special practitioners find field for most useful labor. They gain by constant iteration a skill in diagnosis and treatment impossible to others. They have already mastered more of their subject than other medical men can, and they are of course upon high vantage-ground. This is true, both in cultivating the science of their subject and in using it for the sick.

I therefore conclude that there is a necessity for the work of the special practitioner; that it is fraught with benefit to the art and science of medicine; and that it is not only justified but to be honored in its practice.

Secondly.—It must be admitted that odium has come upon "specialists," because so many have been guilty of most unworthy acts—men arrogating to themselves knowledge they do not possess, and vaunting power of cure both false and impossible. These men have cunningly acted upon the principles I have set forth, have gained the ear of the public, whom they have partly corrupted into the notion that a specialist may be, if not must be, something of a "quack," and have excited the prejudice of many in the profession against the principle of specialism.

Specialties have been the fertile region of quackery.

So gross is this perversion, that I maintain that not only should the true specialist receive the meed of respect belonging to every sound physician, but should be honored as among the most deserving.

What should a specialist be? He must always be a well educated physician; informed in all the usual departments of medicine and surgery. He must begin his career in the same manner as does every other physician; laboring in every part of his profession—anatomy, surgery, physiology, pathology, theory and practice, therapeutics, obstetrics, chemistry—all. He has no right to omit any; he degrades

himself, and throws obstacles in his path if he do. Moreover he should, if possible, have hospital experience, serving in the same manner as other young medical men. When he has thus qualified himself to take a respectable position among his contemporaries in study, let him intensify his efforts upon his specialty. Whatever it is that wins his desire, let him master it in the most perfect manner; pressing forward with enthusiasm, determined to leave in this subject nothing outside of his mental grasp.

When a man has done this he is fit to be styled a "specialist," and to assume the position which the term implies, viz. a superiority above his fellow practitioners in this point. Let him see to it that he can maintain himself on this height.

So large are the demands upon the specialist in his preparatory training. If he think to slur the general knowledge of medicine, or if he go so far in ignorance and arrogance as to neglect it entirely, he is not fit for the society of members of a liberal profession. His calling becomes a trade, a business; he inclines to the arts of the empiric.

A moment's reflection will show that, as the selection of specialties is arbitrary, one organ or set of organs can no more be treated in disease without bearing in mind the influence and relations of the remaining organs, than their mutual dependence in health can be disturbed without causing mischief. In dentistry, syphilis causes fragility and caries of the teeth; in ophthalmic science, fatty degeneration of the retina is caused by Bright's disease of the kidneys; insanity depends often on perturbations of the chylipoietic organs; instances to this point are innumerable.

Qualified in this manner, the specialist becomes in his department a consulting physician, and this leads to the last point of discourse, viz.—

Thirdly.—His relations to the profession and the community. Towards his brethren he must strictly observe all the code of ethics; he must not obtrude his merits upon their notice in too eager a manner. Let him gladly seize an occasion to show what skill and knowledge he possesses, and convince them by his deeds rather than set forth lofty assumptions. He offers them his peculiar capabilities; if he do it as a courteous gentleman, the profession meet him with welcome recognition. He becomes valuable to them; they become invaluable to him. With such tone of conduct, is there room for petty jealousy to sow discord among brethren? Certainly not. If it do spring up, it is in fields where an enemy hath come in and sowed tares. There need be no rivalry. The specialist must not seek to appropriate everything in his subject to himself; he must not sneer at the abilities of ordinary physicians in the usual run of cases. So, too, in unusual cases; in cases of doubt and grave responsibility; in cases where, by employing a higher operative skill a better result may be gained, as in preferring the extraction of cataract to the operation of depression; these are cases where the general practitioner should gladly resort to the specialist. Towards the community, the specialist in his small sphere sustains the same relations as does his brother in the wider sphere. He offers his talents and labors for the relief of distress. He must decline entering upon labor outside of his own limits, where he can do so without incurring the reproach of inhumanity. He may not disregard the plea of distress demanding instant relief. Such cases sometimes fall in his way, and he must meet them with a willing heart and instructed mind. He must not, however, jostle his fellow practitioners as they hold their course in other fields, if he would gain their most hearty confidence and aid. Let him not resort to unusual methods to attract public notice. If advertising in medical journals be counter to the etiquette of the profession where he lives, let him avoid it utterly. The specialist's best friends are the profession; they will help him to the confidence of the community. Let him spurn all low devices to thrust himself into notoriety.

Let him give himself to the science of his study with untiring zeal; let not the press of or the desire for practice

cause him to lose sight of this end. It is his business to leave his specialty pushed further towards perfection than when he began its cultivation. The specialist must be earnest, high-minded, zealous for his own studies, courteous towards all. Knowing his merits, yet modest in making them known, he must be the cultivated, and courteous, and upright physician.

SPECIALIST.

THE LATE MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR—As a member of the American Medical Association who has taken a deep interest and an active part in its proceedings from its inception, I beg to add my testimony to yours, that the Association at its recent meeting "failed to answer the just expectations of its friends." The chief interest manifested by large numbers of its members, at its recent meeting, seemed to be in the choice of its President and other officers; and very slight observation sufficed to show that the election of a certain individual was a foregone conclusion from previous caucusing and correspondence. To what extent this effort was controlled by a spirit of disloyalty to the government will never be fully known; one thing is now generally acknowledged—that if the political bias and course of the President elect since the commencement of the war had been generally known to the members of the Association, he would have been overwhelmingly defeated. Of this he was himself probably well aware at the meeting at Chicago last year, and therefore very wisely declined being a candidate. We trust we shall never again be compelled to hear a retiring President electioneer in his inaugural address in behalf of his successor.

The Association thus far, except when viewed in its social aspects, has been for the most part a failure. As Dr. W. Hooker, of New Haven, well stated, its "Transactions" lumber our book-shelves, and are not worth the space they occupy. Few consult their plethoric pages; and all that the volumes contain that is of any value could be compressed within a moderate-sized octavo. It has neither controlled medical opinion nor practice, and nearly all its proposed measures of reform in regard to medical education, etc., have fallen to the ground unheeded. The same may be said of its influence on medical ethics. Its code has had no more effect than so much blank paper. Its very members openly follow modes of quackery denounced in the code of ethics for which they voted. For these and other reasons, which you have so well stated, there is "danger of its gradually sinking into hopeless imbecility."

What, then, can be done to give it respectability and correct its downward course? You have suggested the great remedy: "a more select representation;" "greater care in the selection of delegates, and more care in the selection of its presiding officer." Instead of selecting some eminent man to preside over its meetings, whose name would do honor to the Association, the present policy would seem to be to lift some ambitions and comparatively unknown individual, of mediocre ability and attainment, from his provincial obscurity, and confer on him a transient notoriety (fame it cannot be called), which will suffice for a lifetime of empty boasting and conceited egotism. This Association had its origin in the spirit of the age in which we live; it was a want of the times; it was peculiarly suited to our institutions; it was suggested by the formation of the "British Association for the Advancement of Science," formed in 1830, and the "Provincial Medical Association," founded in 1832; but it has not met with the success which attended either of these bodies. From studying the histories of these associations, it becomes very evident that their prosperity and success have been mainly owing to the able manner in which the trust reposed in their managers has been fulfilled; and no truth is more evident than this, that the success which all similar insti-

tutions have attained, has arisen chiefly from the activity and energy manifested by those who have the immediate care and management of their concerns. All the influential officers should be men of marked ability and energy, and known to be ardent and successful cultivators of medical science. They should be men of acknowledged zeal and activity, anxious to promote the usefulness and dignity of our profession, instead of being intriguers for office and personal honors.

A retrospective address or report should be made at each meeting, pointing out the discoveries and improvements made in medicine and surgery since the last meeting of the Association; and the President should see that some suitable person be employed to perform this duty. He should also direct inquiry to many important points upon which the present state of our knowledge is particularly defective, and thus open up channels for thought and investigation. The President also might, by correspondence, procure valuable original papers on subjects to which eminent members have devoted much time, thought, and special investigation; and no mere compilation, except the historical one above mentioned, should be read or find a place in the pages of the "Transactions." The appointment of a Permanent Secretary will greatly facilitate the practical workings of the Association, and contribute materially to its greater success in the future. The Publishing Committee should have ample power of selection and expurgation as regards all papers submitted to them; and those papers which are published should be arranged under appropriate heads, and an ample index appended. *Medical Topography and Epidemic Diseases* should receive far more attention; and concise reports on these subjects should be solicited from different sections of the country. The disease called "spotted fever" or *cerebro-spinal meningitis*, should receive special investigation during the present year, by qualified observers in regions where the disease prevails.

As much attention has been recently drawn to the subject of vaccination, it is very desirable to consider the question, Whether any, and if so, what other diseases may be propagated by impure vaccine matter, and how may the danger of using such matter be avoided? It is also important to settle the question definitively, inasmuch as many are yet sceptical whether small-pox and kine-pox are the same disease, only modified by passing through the system of the cow; and what relation does the *graze* in the horse bear to these diseases? It is time these questions were set at rest.

But I need offer no more suggestions. If the past meetings of the Association have not proved as profitable in a scientific point of view as might have been expected, they have at least tended to promote good and kindly feelings and fellowship in the profession, and to kindle anew those sympathies of friendship, the remembrance of which has been cherished through years of absence, but which, but for these meetings, might never again have been called forth.

M. D.

Army and Navy.

CIRCULAR LETTER.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., June 22, 1864.

Surgeon D. L. Magruder, U.S. Army, Medical Purveyor, Louisville, Kentucky, is hereby appointed *Chief Medical Purveyor* for the Military Departments of the Ohio, Cumberland, Tennessee, Arkansas, Missouri, Kansas, the Northern and North-Western Departments.

All Medical Purveyors, and Medical Storekeepers acting as such, in the above-named Departments, will transmit to Surgeon Magruder, on the last day of each month, certified Invoices of Property remaining "on hand," and will obey such instructions and orders as he may deem proper to give them from time to time.

By order of the Surgeon-General:

C. H. CRANE,
Surgeon, U.S.A.

CIRCULAR LETTER.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., June 27, 1864.

Whenever a General Hospital is discontinued, the Medical Officer in charge will be instructed by the Medical Director of the Department to forward to the Surgeon-General's Office full reports of Wounded, Surgical Operations, Secondary Hemorrhage, Tetanus, and Pyæmia for the period of time elapsing between the last quarterly report and the date of discontinuance of the Hospital.

In the Reports of Wounded and of Surgical operations, especial care should be observed to furnish the results of those cases "remaining under treatment" at the date of the last quarterly report. A list of such cases can be obtained on application at the Surgeon-General's Office.

By order of the Acting Surgeon-General:

C. H. CRANE,
Surgeon, U.S.A.

CIRCULAR LETTER.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., June 15, 1864.

By authority of the Hon. Secretary of War, on and after July 1, 1864, the pay and allowances of hospital employes will be as follows, viz.:

I.—Male nurses and cooks (white) twenty-four (\$24) dollars per month and one ration per day.

II.—Female nurses and cooks (white) sixty (60) cents per day, and one ration.

III.—No clothing will be furnished, nor will any part of the monthly pay be retained.

IV.—All existing contracts will be annulled on July 1, prox.; the commutation value of clothing due will be paid, and new contracts entered upon at the rates above indicated.

Surgeons in charge of U.S.A. General Hospitals will not employ civilians as nurses (male) or cooks (male or female), without the approval of Medical Directors.

The application for permission to employ such persons must, in every instance, set forth the absolute necessity for their services, and the fact that it is impossible to procure suitable enlisted men for this duty.

Female nurses will be appointed under the provision of General Order, No. 851, dated War Department, Adjutant-General's Office, Washington, October 23, 1863.

By order of the Acting Surgeon-General:

C. H. CRANE,
Surgeon, U.S.A.

CIRCULAR LETTER.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., July 1, 1864.

The following decision of the Adjutant General, made on an appeal from the decision of the Medical Director, Department of Missouri, in refusing to furnish a complete record of sick, wounded, and deceased officers and soldiers, is published for your information and guidance:

"ADJUTANT-GENERAL'S OFFICE,
June 10, 1864.

"The principle involved is this: No information must be given by any officer in the United States service to any person, under any circumstances, which can be made the basis of a claim against the Government for pay, pension, or other allowances, except it be given as the Regulations prescribe, to the *Adjutant-General*, or proper officer of the *Treasury* or *Pension Bureaux*.

"Information of sick and wounded officers and men may be freely given to any one to allay anxiety of friends, and the bare fact of death may be communicated to relatives, but not *dates*, or any circumstances which would be required to be used in prosecuting claims. The parties interested must satisfy the *accounting officers of the Treasury* that they are legal claimants, and then this office will obtain and give, to those officers, all the evidence necessary to perfect the claim.

"These rules are to guard the Government, as well as *lawful* claimants, against frauds.

E. D. TOWNSEND,
Assistant Adjutant-General.

By order of the Acting Surgeon-General:

C. H. CRANE,
Surgeon, U.S.A.

ARMY.

ORDERS, CHANGES, &c.

APPOINTMENTS.

Dr. Nelson S. Drake, of New York, to be Assistant-Surgeon of Volunteers.

DISCHARGES, DISMISSALS, ETC.

Surgeon George A. Otis, 27th Mass. Vols., honorably discharged on tender of resignation.

Hospital Steward J. M. Johnston, U.S.A., honorably discharged to accept commission as Lieutenant 186th Penn. Vols.

Assistant-Surgeon S. Compton Smith, 8th Alabama Cavalry, "for habitual drunkenness while on duty, and for leaving his command and abandoning the sick and wounded men of his regiment, while in active campaign and in the face of the enemy," is dismissed with forfeiture of all pay and allowances.

Hospital Steward T. J. McMillan, 15th Regt. V.R.C., honorably discharged to accept appointment as Acting Assistant-Surgeon, U.S.A.

Medical Cadet Samuel Holman, U.S.A., honorably discharged, to accept a position in the U.S. Navy.

Assistant-Surgeon George S. Engler, 6th Penn. Cavalry, honorably discharged, having tendered his resignation on account of physical disability.

Assistant-Surgeon J. B. Green, 5th Rhode Island Artillery, dismissed for absence without leave.

LEAVES OF ABSENCE.

Surgeon J. B. G. Barter, U.S.V., extension of forty days.

Chaplain M. J. Gonzales, U.S.A., extension of fifteen days.

Assistant-Surgeon L. D. Sheets, U.S.V., for fourteen days.

RESIGNATIONS.

Chaplain Charles W. Heisley, U.S.A., to take effect June 25, 1864.

Chaplain John Valley, U.S.A., to take effect June 30, 1864.

ORDERS.

Assistant-Surgeon C. E. Goddard, U.S.A., is relieved from duty in the Department of the South, and will report to the Commanding Officer at Fort Delaware, Del.

Assistant-Surgeon H. E. Silliman, U.S.A., is relieved from duty at Fort Delaware, Del., and will report to the Commanding General, Department of the South.

Surgeon A. H. Thurston, U.S.V., is relieved from duty in the Department of Washington, and will report to the Commanding General, Department of the East.

Assistant-Surgeon Nelson S. Drake, U.S.A., will report to the Commanding General, Army of the Potomac.

Surgeon D. P. Smith, U.S.V., is relieved from duty in the Department of Washington, and will report in person to Surgeon C. McQuiggall, U.S.A., Medical Director, Department of the East, for duty in charge of the Hospital Transport Atlantic or Baltic.

Surgeon R. K. Smith, U.S.V., is relieved from duty in the Department of the Gulf, and will report to the Commanding General, Department of Virginia and North Carolina.

Assistant-Surgeon D. W. Onderdonk, 1st Maryland Cavalry, is relieved from his present duties, and will join his regiment without delay.

MISCELLANEOUS.

Assistant-Surgeon C. F. Brisbane, U.S.V., is on leave at New Providence, N.J.

The muster out of Assistant-Surgeon John M. Kollock, 118th Penn. Vols., has been revoked, there being no vacancy in the regiment to which he was promoted.

ASSIGNMENTS.

Surgeon A. M. Clark, U.S.V., as Surgeon-in-Chief, 3d Division, 10th Corps.

Hospital Stewards William Palmer, A. T. Poole, and E. S. McCleary, U.S.A., to duty in the Office of the Surgeon-General.

Assistant-Surgeon William Carroll, U.S.V., to the Hospital of the 6th Army Corps, City Point, Va.

Acting Assistant-Surgeon R. Wirth, U.S.A., as Surgeon in charge, Joo Holt Hospital, Jeffersonville, Ind.

Surgeon A. M. Speer, U.S.V., as Surgeon-in-charge of General Hospitals, Covington, Ky.

Assistant-Surgeon Theodore Artaud, U.S.V., to 1st Division General Hospital, Alexandria, Va.

Surgeon A. C. Benedict, U.S.V., to Hospital Transport Thomas Morgan.

Surgeon A. M. Wilder, U.S.V., as Medical Inspector, Army of the Ohio.

Assistant-Surgeon A. B. Chapin, U.S.V., to the Hospital of the 10th Corps.

Surgeon Charles O'Leary, U.S.V., to inspect the operation of the different Boards of Enrolment in Pennsylvania.

NAVY.

Regular Naval Orders.

Surgeon Philip Lansdale's orders to the Canandaigua revoked, and ordered to take passage to New Orleans, for duty on board the Hartford.

Surgeon John G. Taylor, detached from the Oneida and ordered north.

Surgeon John J. Gibson, detached from the Hartford and ordered to the Oneida.

Assistant-Surgeon Samuel G. Webber, detached from the Chineeo, and ordered to take passage to Charleston for duty on board the Nahant.

Surgeon William T. Hood, ordered to duty connected with recruiting in New Jersey.

Volunteer Naval List.

Acting Assistant-Surgeon John Flynn, detached from the Nightingale and waiting orders.

W. J. Simon, appointed Acting Assistant-Surgeon, and waiting orders.

Stephen Cushing, appointed Acting Assistant-Surgeon, and ordered to the R.ceiving Ship "Ohio," at Boston, Mass.

Foster Thayer, appointed Acting Assistant-Surgeon, and ordered to the Receiving Ship "Ohio," at Boston, Mass.

Acting Assistant-Surgeon William H. Bennett, ordered to the Mount Vernon.

Acting Assistant-Surgeons Orwald Warner, W. H. Campbell, and William Nelson, resignations accepted.

Acting Assistant-Surgeon William Gader, ordered to the Jacob Bell.

Original Lectures.

OVARIOTOMY;

BEING AN ABSTRACT OF REMARKS MADE

By E. R. PEASLEE, M.D.,

BEFORE THE N. Y. ACADEMY OF MEDICINE, JUNE 15, 1864.

MR. PRESIDENT—Before I consider the practical bearings of this subject, I should state that T. Spencer Wells claims for this operation of ovariectomy a British origin. The foundation he has for such a statement will be apparent when I rehearse the following facts. John Hunter, about one hundred years ago, first proposed the operation, and that proposition was endorsed by Professor John Bell of Edinburgh. Dr. Ephraim McDowell, of Kentucky, who had been a pupil of Mr. Bell, was, however, the first man to perform the operation and act upon the suggestions which had already been thrown out. This first operation was in 1809, fifty-five years ago. Dr. McDowell lived until 1830, and during the last twenty-one years of his life he performed thirteen operations, of which at least eight are known to have succeeded. Fourteen years after the performance of his first operation, he wrote a description of it to his former master, but Dr. Bell having died before the letter reached its destination, the facts of the case came into the possession of Mr. Lizars, who was his successor. That gentleman was induced to try the experiment, and accordingly first attempted the performance of the operation in 1823. The case was, however, unsuccessful, as he had made an error in diagnosis, there being no tumor there to remove. He operated twice more within the next two years, and once succeeded. From this time until 1827, when the operation was successfully performed by Mr. Greenville, there had been but five cases operated upon in Great Britain, and of these there were only two successful ones. For six years after the death of Dr. McDowell there was not a single operation; in 1836 there were two operations, which were both successful. In 1838 there was one successful case; and in 1839 two, and one failure. Up to 1840 only eleven operations in all, that had been performed in Great Britain. In 1840 the first operation that was ever completed in any London hospital was performed. In 1842 the first successful case operated upon in London occurred. The first operation that succeeded in any London hospital was performed by Caesar Hawkins in 1846. During all this time, however, the operation was being performed frequently on this side of the Atlantic. In 1842 Baker Brown commenced his career and performed nine operations by the year 1846; but of these having saved only two, he became discouraged, and did not operate again for more than four years. He is, however, again operating with good success. It was in 1857 that T. Spencer Wells first commenced his series of operations. I merely mention these facts to show that if ovariectomy is a British operation, it is so precisely in the same sense in which Dr. Jackson, and not Dr. Morton, is the discoverer of the anæsthetic effects of ether. The suggestion was made by one Scotch mind and endorsed by another, but that suggestion was first practically carried out by an American; and but for Dr. McDowell we have no reason to suppose that the operation would have been performed on the other side of the Atlantic for many a long year to come.

I propose to arrange what I have to say upon the subject of ovariectomy under the four following heads, which I shall put in the form of questions:

First. Ought ovariectomy to be recognised as a legitimate surgical operation? *Secondly.* If so, in what class of cases, and under what precise circumstances on the part of the patient is it justifiable—and what circumstances give us reason to hope for success? *Thirdly.* How is it to be performed? and *lastly,* What is the proper treatment after the operation?

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I. With regard to the first question, the opposers of the operation rest their objections upon three distinct grounds. In the first place, then, their objections are based upon statements sustained by mere *à priori* reasoning; secondly, upon mere authorities; and thirdly, upon their representations that the statistics of the operation are not to be relied upon. First, in regard to *à priori* reasoning, it is sheer nonsense to attempt to settle any practical question in this way. Professor Lardner decided by this mode of reasoning that a steamer could never possibly cross the Atlantic, since no vessel could carry coal enough, etc., etc.; but while he was resting perfectly satisfied with the truth and strength of his argument, some one made the attempt and succeeded. A great many instances have occurred in which practical men have overthrown such arguments in our profession. The main objections urged on *à priori* grounds against this operation are these: In the first place, it is a very dangerous operation; in the second place, you may so often prolong life by palliative means that it is wrong to attempt it; thirdly, if you succeed in the operation, you may not cure the patient radically; and fourthly, it is very difficult to make a correct diagnosis. The objections have all been answered so well by Prof. Simpson of Edinburgh and by Prof. Miller of Kentucky, that I will not take up the time of the Academy with them. The assertion that, if you perform the operation and succeed, you do not necessarily radically cure the patient, amounts to simply this—that if you remove the ovarian disease you cannot be sure that the other ovary may not also become diseased. Apply the same principle to the treatment of a fractured leg, for instance. If you should treat a fracture of one leg, you cannot know but that the other limb may subsequently become fractured. But in consideration of such a probability, is any surgeon warranted in neglecting to treat the case altogether?

In reference to the supposed difficulty in diagnosis, I will propose a practical rule which will almost neutralize that objection. In the first place, never regard ovariectomy as an operation which should be performed in a hurry, and while the patient is in good health. If you wait some months, or a year or two, which is always best if it be possible, you will have ample time to form a correct opinion of the case; and if you wait till tapping becomes necessary, the diagnosis can thus be strengthened or corrected, while at the same time by that palliative operation the chances for recovery from ovariectomy are on the whole increased. Another rule is, when you attempt to perform the operation, always regard your incision as explorative until you come to the point to determine whether you will finish the operation or not. By observing these rules, we may, I think, overcome any difficulties in diagnosis which at first sight may seem to exist.

Next in regard to settling a question by mere authority. We hear it stated as a very important matter that Cruvelhier is opposed to the operation: so is Trousseau—one a surgeon and the other a physician. Velpeau is opposed to it; so is Piörry; and so we may mention many other great names opposed to ovariectomy. Of course the question at once naturally occurs—What special qualifications have these gentlemen for settling the question at issue? Those who have written most and said most in this direction are Mr. Liston, Dr. Mütter of Phila. (who was the editor of Mr. Liston's work), J. Matthews Duncan of Edinburgh, Robert Lee of London, and the French Academy of Medicine, whose opinion was indicated by the famous discussion which took place during the winter of 1856–57. I have also heard the authority of a society in a neighboring State quoted against the operation; that society having formally denounced it by vote. Notwithstanding, however, all these authorities, Dr. Atlee is operating constantly and saving over two-thirds of his patients, and Spencer Wells has saved fourteen out of fifteen, and more recently eighteen out of twenty, and Tyler Smith saves eleven out of fourteen. But what are the peculiar qualifications of the gentlemen named? Liston never performed the operation,

and did not think he ever should. Is his opinion worth any more than that of Atlee of Phila. or Tyler Smith of London? Prof. Mütter of Phila. follows in the footsteps of Mr. Liston, and even condemns the operation in more forcible language. Dr. Duncan, who is a physician, merely comes to the grave conclusion that this question ought to be left to the arbitrament of professional opinion. How does professional opinion always decide with regard to any new question? Always in the negative! It is sufficient that the question should involve a new principle to be voted against by the profession at first; it devolves upon those who advocate the new doctrines to prove their value. So much for professional opinion. But whenever a new thing is proposed there are always certain individuals in the profession who feel themselves called upon to denounce it; they are the *champions of the negative proposition*. They first endeavor to prove that the thing is impossible; if they are obliged to quit this proposition, they try and prove the thing has been done even by Galen and Celsus; and finally when the profession generally are obliged to accept it, they try to show that after all it is of no account, besides being very wrong.

But to return. What special qualification has Dr. Robert Lee for settling this question? He is simply an obstetrician, not even an obstetric surgeon! He never performed the operation nor saw it performed, and never would see it performed. He made diligent search for statistics upon the subject, and states as the results of his observations that the statistics of others are unreliable. Why? Because he found in his search that thirteen unsuccessful cases had not been reported. I know of thirteen cases that were operated upon *successfully* by Dr. Kimball of Lowell, not one of which has been reported; and Dr. W. L. Atlee has had over forty successful cases which have not yet been reported. Is Dr. Lee then warranted, on these grounds, in asserting that the statistics of the operation are unreliable? Dr. Lee had been repeatedly asked to witness the operation of ovariectomy, but always refused until the 12th of Nov. 1862, a day memorable in the history of his intellectual progress, when he was actually found to be present at an operation performed by T. Spencer Wells. But instead of looking, as we would expect such a searcher for the truth to, with intense interest into the condition of the patient, and discussing in his own mind the chances for a successful issue, and noticing the different steps of the operation, the effect upon his mind was altogether different and quite peculiar. In alluding to this operation before a medical society in London he exclaimed, "I thought of Judas Iscariot!" And in that same connexion he quoted and endorsed the coarse language of Liston, that ovariectomists were "belly-rippers, with a B behind and a B before." I have never, however, succeeded in appreciating the vulgar wit which this last line may contain.

The discussion alluded to in the French Academy of Medicine engaged many of the most distinguished physicians and surgeons, and was continued for five months, but not a single member except Cazeaux, an obstetric surgeon, spoke in favor of the operation. Yet, from the fact of his being acquainted with the progress of the disease if neglected, and the results of the operation, he was better qualified to judge, and his sole opinion was worth more than all the rest combined. Cruvelhier says that the solid and polycystic tumors are both stamped with the seal of incurability, and that you can do nothing for them short of extirpation. Still he asserts that, "although this operation has been done many times with success in America, I think it ought not to be cited in science."

Piorry says that the performance of this operation requires an "American audacity" (audace Américain). So all denounce it, Velpeau and Malgaigne included. Now, of all those gentlemen who denounced the operation so strongly in the French Academy, not a single one had performed the operation, nor seen it performed, so far as we can learn. Besides, this was the decision of that learned body seven years ago. But even if it had been worth anything then,

the statistics of the operation since that time are alone sufficient to demonstrate the opposite view of the case.

Now I wish here to state generally with reference to going to Europe to borrow our medical and surgical opinions—going to France, where this operation is almost never performed, to inquire if it be right to operate in America or in England; or to Germany, where seventy-three out of one hundred die, to get an opinion whether this operation is justifiable or not—I think we have enacted enough of that species of folly already. I think we are capable, and ought to exercise the right, of forming our own opinions upon the facts; and *we* have the facts. We are certainly thankful for facts from every part of the globe; but we are capable of weighing them in the scales of our own judgment.

(To be Continued.)

Original Communications.

REPORT OF SIXTY CASES IN PROF. NOEGGERATH'S CLINIC FOR DISEASES OF FEMALES, AT THE N. Y. MEDICAL COLLEGE,

WITH REMARKS.

REPORTED BY C. C. TERRY, M.D.

(Continued from page 267, Vol. VIII.)

SUPERINVOLUTION—SUBINVOLUTION.

IV.—MARY P., æt. 37, a strong, well developed woman, has been married nine years and has had two children; the last is five years old, and both are healthy.

The history of this case, as derived from the patient's account, indicated post-puerperal inflammation. She complained of dizziness, with continual headache and flushes of heat, backache, and dragging sensation in the pelvis; symptoms subject to exacerbations corresponding to monthly periods. The menses have been entirely absent during the five years succeeding the last confinement, never having appeared since the child was born, although at times the symptoms have been severe. The uterus was found very small, scarcely larger than the uterus of twelve years, and the os entirely closed though not obliterated. The cervix was nipple-shaped, and the whole organ very movable.

V.—Jane S., æt. 25; married four years; has had two miscarriages—one in the fifth month, the other in the seventh. The last miscarriage occurred eight months ago. Her habits for most of her life since the menses appeared have been sedentary; constipation has been a continual, and scanty urination an occasional, inconvenience for half a dozen years. She complains of backache, especially in the lumbar region; burning in her eyes; neuralgic pains about the chest, especially under the mammæ; and loss of memory. There is constant pain in the left iliac fossa, increased by pressure, which has existed with more or less severity since the last miscarriage. The menses are regular, lasting four days, with little more than the usual pain. The uterus large and soft; the cavity enlarged, and directed to the right.

VI.—B. C., æt. 35; was confined with her last child a year ago. Since that time she has not menstruated regularly, but has been subject to hæmorrhages from the uterus at irregular periods, oftener than once a month, and at times considerable. There is pain in the right iliac region, backache especially in the lumbar region, and fluor albus. The last labor was difficult; the placenta was prævia, and the child was turned. The "getting up" was tedious, lasting several weeks. Examination by the vagina revealed a large, soft tumor behind the posterior cul-de-sac, nearly obliterating it. The uterine tissue was softened; the cervix broad, but not long; the os patulous. The sound showed an increased uterine cavity and a considera-

ble retroflexion, with slight lateral displacement to the right. Another case of subinvolution, complicated with anteversion, appeared once at the clinic, but it is only mentioned in these reports because the history was not sufficiently obtained.

Superinvolution and subinvolution are both results of a purely physiological process. The enlargement of uterus during pregnancy is due partly to the increased size of the muscular fibres already existing, and partly to the development and growth of new muscular fibres of precisely the same kind, and with the same tendency to increase in size as the primitive fibres. After the contents of the uterus have been expelled, the need of such enlargement and muscularity is relieved, the organ atrophied; and these two wonderful changes in the condition of the uterus—the great increase before, and nearly equal decrease after parturition—are wonderful only from their rapidity; for every organ of the body, after having fulfilled its purpose, is subject to the same change, however differently or slowly it may be effected. The change in the muscular fibres of the uterus by which it returns to its unimpregnated size, is effected partly by a withering, on account of the diminished supply of blood, but mostly by a fatty degeneration and subsequent absorption of the muscular fibres. These same changes of increase and decrease follow in different degrees any expansion and subsequent evacuation of the uterine cavity. It would be an interesting inquiry to know whether this degeneration affects equally the primitive and the new fibres, or whether the primitive fibres are not reduced by mere shrinking. This process of subsidence is called involution. The uterus never recovers the same form and size it had before pregnancy.

In the virgin and nulliparous uterus the cavity of the body is divided into two parts—one commencing at the neck, narrow and long, the other between the openings of the Fallopian tubes, formed as it were by two trigons connected at the bases. Thus the three sides of the cavity are convex, while the cavity of the neck is only a trifle larger than at birth, and still as long as the cavity of the body, enlarged in the middle, and nearly closed at both extremities. The free edges of the folds representing the branches of the arbor-vitæ look downwards, and may be so projected as to catch the point of the probe. The os externum is more transverse than circular. In the multiparous uterus, in its normal condition, the cavity of the body is quite triangular, still inclosed in convex lines, but much less so than in the virgin uterus. The vertical and lateral diameters of the organ are both increased; the cavity of the neck is larger, but shortened; the arbor-vitæ nearly or quite obliterated; and the os externum expanded transversely. There is thus something like a standard for the uterus when it returns after parturition, when it *involves*. If the process is carried *beyond* the standard, it is called *superinvolution*; if it stops *short* of the standard, it is called *subinvolution*.

The uterine atrophy which results from excessive resorptive power is comparatively rare, but when met, is as easily diagnosed as any of the other organic diseases of the uterus. In the mere history, taken from the lips of the patient, there is nothing pathognomonic of the special condition. The symptoms all point to the uterus, but the physical examination is the combining and conclusive means of diagnosis.

The post-puerperal inflammation in the fourth case might as well have resulted, and usually does result, in sub-, rather than superinvolutions; the intense congestion prevents, in a great degree, the process of absorption, at the same time that the inflammatory exudation infiltrates the tissue and contributes to its size. The total absence of the menses would suggest a much diminished secreting surface; and the sterility observed in such cases as have been reported, both of superinvolution and congenital smallness of the uterus, would suggest incapacity from smallness, since the subinvolved uterus so often conceives only to expel the product of conception prematurely and repeatedly. All

the concurrent phenomena of menstruation are frequently present at the proper periods; but, instead of the uterine discharge, there results great suffering to the patient by reason of the congestion of the pelvic organs, or a vicarious discharge from the bladder-bowel or more distant part.

The first symptom of superinvolution which attracts the attention of the patient is usually the continued suppression or very scanty discharge of the menstrual fluid. During lactation the menses are usually absent, and the patient first notices the abnormality soon after weaning the child. One, two, or three months may pass, and she becomes anxious, or fancies herself again pregnant; but as the months pass, and no other symptom of a new pregnancy appears, but on the contrary headache, backache, and a feeling of unrelieved distress in the pelvic organs occurring periodically, she is at last made aware that something is wrong with her womb. Sometimes years of sterility and more or less suffering are required before medical aid is sought. Sometimes the breasts shrink, the subcutaneous adipose tissue begins to be absorbed, and the skin wrinkles, while the whole system is affected by the change in the uterus as it is at the climacteric period when the uterus normally ceases its functional activity. Some patients are anæmic from the depression of the vital powers; others may be plethoric from the accumulation in the unrelieved circulatory system. Such was the condition in Case IV. But the distinctive characters of this condition of the uterus are found only by adding physical exploration to the rational symptoms already obtained. The abdomen may be normally full, but no uterine fundus can be felt by the most careful external palpation. The vagina may be normal, but high up in its roof we feel a small nipple-shaped cervix, with a minute depression corresponding to the external os, or a mere depression where the cervix should be, and nothing corresponding to an os externum. The speculum shows the tissue pale. The sound, or perhaps only the pocket-probe, enters the uterine cavity two inches and a half, two inches, or barely an inch and a half. The organ is small, mobile, and when pushed with the sound against the rectum or abdominal wall, its own parietes are found to be exceedingly thin—so thin and friable that the sound has been accidentally pushed through into the peritoneal cavity. In the normal condition of the reproductive organs an ovary may sometimes be felt; but in the superinvolved condition of the uterus the ovaries, as shown by post-mortem examination, may become similarly affected and shrink to a comparatively small size, and the Graafian vessels disappear. In fact, the uterus may return to the ante-puberal size and become similar to the undeveloped uterus, as noticed in the first class of cases in this report. This will explain the symptoms, the headache, the general debility, the periodic congestions of the neighboring organs, and the sterility.

In the treatment of a superinvolved uterus regard must be had to the age of the patient, for if the climacteric period is near, little can be accomplished, and little is desired further than to relieve the immediate distress. But if the patient be young and in otherwise good health, the prognosis is by no means despairing. There, as in the case of congenitally deficient uterus, is the same double indication; once establish those two conditions, and the sterility will likely enough disappear. The peculiar infra-mammary pain in Case V. will be noticed hereafter.

Various means are proposed to increase the nutrition and restore the functions of the superinvolved uterus. The whole list of emmenagogues has been gone through over and over again, each in its day popular, and each failing to give satisfaction.

The Japanese and the Greeks of the time of Hippocrates are reported to have possessed specifics; but the one is too far in the past, and the other too far in the improbable, to fulfil our hopes and wishes. The only reliable means of remedy seems to be the uterine sound or pessary. So this condition of the uterus is similar to the condition already mentioned in the three first cases, as the indica-

tions and advantages are similar; and as I have there spoken sufficiently of the sound, it is proper to consider a means of cure which certainly surpasses all others.

The ordinary intra-uterine pessary is but a sound used continually instead of occasionally.

The galvanic pessary combines the advantages of the ordinary intra-uterine pessary with the powerful stimulus of the galvanic current.

GASTRALGIA,

THE INITIAL SYMPTOM OF CARIES OF THE VERTEBRÆ.

By BENJAMIN LEE, M.D.,

OF NEW YORK.

My attention has been so frequently called of late to an important, early, and characteristic symptom of spinal caries, that I feel at liberty to claim for it a more careful consideration on the part of the profession than, I am convinced, they have heretofore given it.

This symptom was first noticed in a paper on "The Mechanical Treatment of Angular Curvature, or Pott's Disease of the Spine," read before the N.Y. State Medical Society at its meeting of 1863, by Dr. Charles F. Taylor, of New York.

I refer to acute paroxysmal, often excruciating pains in the abdomen, generally so nearly in the neighborhood of the stomach that I have ventured to group them under the term of gastralgia, although if I chose to insist on the strict derivation of the word (from *γαστήρ*,* the belly), I might make it cover the entire region. My meaning, however, is sufficiently plain. I desire to indicate a pain originating in the majority of instances at the epigastrium, less often at the umbilicus or between these two regions, and in the smallest number of cases in one side or the other.

This pain is almost invariably the first symptom of commencing caries, or perhaps I should more correctly say, of the inflammation, whether of the intervertebral cartilage or of the periosteum, which precedes the caries. Unhappily our pathology is not yet sufficiently advanced to enable us to say with confidence what the first organic change is. Whether the disease have a traumatic origin in a perfectly healthy system, or is the result of a vice of constitution, the fact is still the same, that in nine cases out of ten it is ushered in by long continued and oft repeated attacks of gastralgia.

The point at which the disease is situated exerts a modifying influence, the middle dorsal being the region in which the affection is most characteristic and more apt to be confined to the epigastrium; but at no point is there entire immunity. This pain does not take its starting-point at the seat of disease and radiate towards the anterior surface of the body, but, as I have stated, *originates* in front. The length of time during which the patient suffers from it before the ulcerative process has destroyed enough of the substance of the bone to produce actual and unmistakable deformity is variable; but it has been noticed not unfrequently six months, and in some rare instances an entire year previous.

So constant is this phenomenon, that out of nearly a hundred cases which I have examined during the past year, I do not think that half a dozen failed to present it; and in some of these there was an entire absence of constitutional symptoms; for, strange to say, the disease may, in some rare instances, go on to produce very marked deformity, without apparently affecting the general health.

In view of this fact, I have with astonishment observed the complete silence of surgical works upon this point. Some of them, indeed, speak of pains taking their rise at the spine and radiating along the sides; but even these are not assigned the place of importance as the ushers of the disease.

Nor does the practising profession appear to be more familiar with the sign. Case after case presents itself with the almost stereotyped history of the first stage: "doctored for worms," or "our family physician treated the case at first as inflammation of the bowels" (a mistake, by the way, which when the disease is ushered in acutely with some febrile reaction, as may sometimes happen, is not singular), or the physician himself frankly admits that for a long time he supposed that he had to deal with simple *gastralgia*, or chronic *gastritis*, and administered his remedies accordingly.

Now, no man is to blame for at first taking the prominent symptom for the whole disease; but if the symptom persist and resist the ordinary remedies, and especially if the pain be decidedly paroxysmal in its character, then let him look most anxiously for indications of spinal diseases.

Pain in the *glans penis* attracts the attention of the physician, not to that point, but the neck of the bladder as the seat of irritation. The surgeon who, at the present day, would permit a patient complaining of constant or frequent pain in the knee, to go without a careful examination of the condition of the hip-joint, would be considered in the highest degree culpable.

In the same manner, and as inevitably, should a persistent paroxysmal gastralgia draw the physician's mind, as by an instructive inference, to the spinal column as the focus of irritation.

Let us suppose the observer fully alive to this fact and on the alert. He is led to suspect the true cause of the suffering. What shall he look for to corroborate his suspicion? First, I say emphatically, not for pain or tenderness along the course of the spine; for if there is one law of this disease more fixed and unexceptionable than the positive one which I have been affirming, it is the negative one that its earlier stages are *never* accompanied by pain at the seat of disease, or tenderness on pressure over the spinous processes. If, therefore, the physician relies upon this, I believe universally admitted, sign, he will be disappointed in his investigation and will lose precious time.

Lesions involving nervous centres express themselves often, perhaps usually, through the general system rather than locally. Let him, therefore, carefully scan the carriage and gait of his patient. If he turn the toes in, if he hold the trunk slightly bent forward and rigid as though apprehensive of a concussion or jar, if he refuse to bend the back in stooping to touch the floor, then there is undoubtedly mischief going on between some of the vertebræ. But he may not yet feel satisfied without some "ocular demonstration." Let him then strip the patient's back, and place him in a good light. Let him examine first laterally. If he find at any point in the spine an angle, not necessarily a projection, but simply an angle, in place of the normal curve, he has found the seat of disease. This failing, let him take the full view of the back. If there be a lateral deviation of the spine, and that deviation present not a curve but an angle, he has then an evidence of *angular curvature* (so called) of the spine.

These instructions will serve to detect the disease very early in its history; so early that very little injury can have been wrought.

No intelligent physician will rest satisfied with a faulty diagnosis, even if no point of practice is involved; but in the disease in question the patient's entire future is at stake.

The dictum of the learned Dr. Miller in regard to both the affection under consideration and morbus coxarius, "that in but few cases a successful issue is to be expected," is happily no longer true. American ingenuity has afforded efficient means for the treatment of both these *opprobria* in their earliest stages, and the question of their early diagnosis is thereby rendered not simply a professional refinement, but a matter of the gravest moment.

159 FIFTH AVENUE, May 15th, 1864.

* Epigastric and hypogastric evidently signify respectively—*epi*, at the top of, and *hypo*, at the bottom of; *gaster*, the belly.

Reports of Hospitals.

EMIGRANT HOSPITAL, WARD'S ISLAND.

THREE CASES OF TETANUS.

(Reported by John Dwyer, M.D., Assistant-Surgeon Ward's Island Emigrant Hospital, late Surgeon 69th Regt. N. Y. N. G. A.)

CASE I.—*Sub-Acute Traumatic Tetanus.—Recovery.*—Corporal James Meehan, 69th Regt. N. Y. N. G. A., æt. 24, wounded by shell at the battle of Deserted House, Va., on the thirtieth of January, 1863. Treated in Brigade Hospital at Suffolk, Va. The left arm was almost completely denuded of muscular tissue on its anterior and external aspects; vein and artery uninjured. The usual treatment was employed, and the wound progressed favorably until Feb. 13th, when, on his complaining of pain and stiffness of the masseter and temporal muscles, the supervention of trismus was apprehended. His health was otherwise good; a liniment and anodyne ordered. Feb. 16th.—Symptoms of trismus well marked; the ward in which he was in, being occupied by other patients wounded in the same action, some of whose limbs I had amputated, I had Meehan removed to an isolated, dark, though well ventilated room; given milk-punch and opium. 17th.—Pain and "catching" at the ensiform cartilage; risus sardonius well marked. At the suggestion of Surgeon Nolan, 155th Regt. N. Y., an asafetida enema was administered. Stiffness of neck and back increasing; milk-punch and morphia one grain at night. 19th.—When he falls into a doze is waked up by teeth closing spasmodically and biting the tongue; gag introduced between teeth; the jaws can be opened to the extent of about half an inch by an effort which, as he expresses it, he has "to make up his mind to." Milk-punch and morphia two grains to-day. 20th.—*Perspiration increasing, with peculiar disagreeable odor.* Asafetida enema, after which he experienced a partial spasm in trunk and thighs; at ten p.m. another enema of asafetida. Diet: beef-tea and toast, the latter reduced to a pulp and taken through the "feeder;" swallows with little difficulty what passes the barrier of the teeth; pulse quick; muscles of trunk, abdomen, and thighs rigid; legs and thighs drawn up towards abdomen. Milk-punch and morphia as before. 22d.—As yesterday. Abdominal muscles hard as a board; neck and back almost opisthotonic; head lower than the trunk. Treatment as before. 22d.—Pains in loins and groins, chiefly the left; had a general spasm this morning lasting a few seconds. Fifteen ounces whiskey, four grains morphia. 24th.—Perspires profusely; pain in ensiform cartilage gone; never sleeps longer than an hour at a time; craves for the whiskey and morphia to relieve him; rigidity of muscles continues during sleep; spasms continue. 25th.—Cathartic administered; acted speedily. Whiskey, twenty ounces; morphia, six and a half grains; slight spasms. 26th.—Very irritable; keeps the attendant constantly on the move; spasms; screams loudly; complains bitterly through his clenched teeth that the slightest noise gives him a spasm; dozes for a few minutes, but wakes up suddenly, screaming; sweating most profuse. Twenty ounces whiskey, six grains morphia during the day. 27th.—Tobacco poultices to abdomen; body sponged with vinegar, whiskey, and morphia as yesterday. Visited by Dr. Hand and several other medical officers of the Division. 28th.—Extremely weak; *perspiration pours from him* (no fire in the room; temperature of external air about 50°); his screams, as the spasms seize him, resound through the building; pulse weak; very much exhausted; case apparently hopeless. Plied him myself with whiskey *ad libitum* in large doses through the night; had seven grains of morphia during this day. March 1st.—Talks incoherently; acts nervously like one in delirium tremens, evidently under the influence of whiskey; fear that he perhaps may have got too much of it, but the spasms are neither so violent nor so frequent as before. Decreased the

whiskey to twelve ounces and morphia to four grains. March 2d.—Much easier; "catches" leaving the groins; now in the knees. Ten p.m. muscles of jaw relaxing; is very weak. Three grains morphia and ten ounces whiskey to-day. March 3d.—Bowels relieved; spasms in knees and great toes; left extremity most affected; his appearance denotes the extreme torture he has suffered; fed with eggs broken up small, beef-tea, etc. From this time he gradually improved, the stiffness in the knees and legs remaining for a considerable period; touch bringing on a slight spasm in them. Morphia and whiskey were still given in gradually decreasing doses. March 14th.—Removed to his old quarters in the hospital; health good; wound healthy; slowly cicatrizing; left leg slightly contracted and shortened. April 15th.—Suffolk being besieged, he was sent with other sick and wounded soldiers to General Hospital at Fortress Monroe. He was then in good health, no spasms, and could walk with the aid of a stick. Wound nearly healed.

Remarks.—The weather was the usual chilly and damp kind of a Virginia February. The patient was not at any time from the receipt of the injury exposed to any extreme of temperature, and was known to be a man of strictly sober habits. The wound always looked healthy, presenting a simple granulating surface, with no undue exudation. The pharyngeal muscles were not severely affected; the glottis and larynx did not seem to be involved; the functions of the bladder were natural; urine scanty, owing, perhaps, to the morphia and excessive perspiration. There was no modification of sensation or motion in the forearm or hand of the wounded arm, though the site of the wound and the supervention of tetanus would suggest that some nerve of the brachial plexus had been injured. The spasms affected the jaws first, then the back, the diaphragm, the abdominal muscles, the psoa, the thighs and legs, terminating literally by going out at the toes. The left side of the body was most affected (left arm wounded). Dr. MacLeod ("Surgery of the Crimean War") remarks that amputation at the shoulder appears to be one of those most frequently followed by tetanus. This case might be called a shoulder wound.

The recovery was apparently due to the active administration of the whiskey and morphia, the whiskey particularly; for, the case being of considerable interest, the treatment was conducted under the immediate supervision either of Assistant-Surgeon Spencer or myself, so that no forgetfulness could occur on the part of the nurse. On the night of the crisis, I have no doubt he drank thirty-two ounces of whiskey.

CASE II.—*Traumatic Tetanus.—Death.*—Hendrick Boettger, German, aged 29, butcher, admitted to Emigrants' Hospital on evening of July 19th, under care of Dr. Guleke. On admission to hospital he had the most prominent symptoms of trismus and tetanus; well marked opisthotonos; could open the jaws slightly during the intermission of the spasms, which were frequent; there was a small open wound over the belly of the gastrocnemius of right leg, which presented no strange appearance; no signs of inflammation. On fourth of July previous he was accidentally shot by the paper wad of a pistol (no bullet). On July 11th trismus commenced; his treatment in the city was merely directed to the wound by poultices, etc. For the purpose of more thoroughly searching the wound and extracting the wad, as also to allay the spasms, we endeavored to get the patient under the influence of chloroform, but his spasms while inhaling it were so extremely severe and frequent as not to warrant a continuance of the proceeding; the wad was, however, extracted. Morphia was then freely administered, with moderate doses of whiskey; but he had very great difficulty in swallowing. Spasms were brought on and increased in severity by touching him. The perspiration was considerable, but did not at all equal in quantity that of Case I. He died thirty-six hours after admission. On post-mortem examination the nerves in the neighborhood of the wound

looked perfectly natural; the wound itself was a small one, and did not involve the muscle, being simply a laceration of the skin and cellular tissue.

CASE III. — Rheumatic Tetanus — Recovery.—Gottlieb Bindar, æt. 32, German; in Emigrants' Hospital, under care of Dr. Guleke, for epilepsy and disease of bicuspid valves of heart. Has frequent attacks of epilepsy, generally at night. On a cold morning in December, after one of those night attacks of epilepsy, he was seized with trismus, and before midday general tetanus set in. No wound or scratch of any kind on his person; the inference was that he had exposed himself to cold during a fit. He was totally unable to swallow; cried out on being touched; his teeth were firmly locked, and all efforts to get anything into his mouth failed; there was opisthotonos; the abdominal muscles hard and tense, as also those of the extremities; severe and general spasms.

Treatment.—He was enveloped in cold, wet sheets, as usual with rheumatic cases, and kept in them for three hours; this process caused him to suffer very much for the first ten minutes, after which time the *tetanic* symptoms considerably abated, leaving him entirely after the three hours had elapsed. In consequence of the complete locking of his teeth, he was treated by injections of beef tea and morphia. The trismus, however, continued persistently for three days, and then gradually disappeared. Several months have since elapsed; the patient is still in hospital, has frequent attacks of epilepsy, but no recurrence of either trismus or tetanus.

"A Dr. Mailloux, first physician to the King or Queen of the Malgaches, informs the Academy of Medicine that he has discovered a remedy for cholera. The disease, he says, acts on the body like hydrocyanic acid, and he saves the afflicted by subjecting them to nitric acid fumigations."

"THE Professorship of Hygiene to the Royal College of Surgeons of Ireland, formerly, at its establishment, held by Dr. Maunsell, but which had remained vacant since his resignation, has been revived. The reason for this is, the increasing attention which is being paid to sanitary matters in Ireland. On Monday last, the election of a Professor took place. There were two candidates; and the choice fell on Dr. Mapother, Demonstrator of Anatomy in the College, and Surgeon to St. Vincent's Hospital."

EFFECTS OF SUGAR ON THE TEETH.—DRS. PAOLO MANLEGAZZA and LABUS, of the University of Pavia, have recently undertaken a series of experiments for investigating the action of sugar on the teeth, and report that sugar (as sugar) does not exercise any chemical action upon the teeth, and that it does not predispose to caries; but only affects the teeth when it has undergone the acetic or lactic fermentation.

CARBOLIC ACID.—The following are some of the diseases in which Mr. Turner of the Manchester Royal Infirmary employs this new remedy: In relaxation of the mucous surfaces, polypi of the nostrils, ozæna, putrid discharges from the mouth, throat, nostrils, ears, rectum, and vagina, it is applied dissolved in glycerine by means of a brush or sponge. In diphtheria it is used topically by means of a sponge-mop, care being taken that it be not saturated, lest a drop should fall into the larynx. The aqueous solution may be used as a gargle. It is applied to ulcers in different degrees of solution, according to the character of the sore. It is applied to fistulæ by means of a catgut or wax bougie, care being taking to carry it to the bottom of the fistula. Where there is communication with the gut, an operation is necessary. Its action being to corrugate, when applied to hæmorrhoids it empties and obliterates the sac. Its escharotic effect is confined to the surface to which it is applied, not spreading to the neighboring parts, as is the case with nitric acid.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, January 13, 1864.

DR. A. JACOBI, PRESIDENT, IN THE CHAIR.

NEW INSTRUMENT FOR STRICTURE OF THE RECTUM.

DR. BAUER next exhibited a new instrument for the dilatation of stricture of the rectum. He remarked that the management of that complaint was more difficult than appeared from the hand-books of surgery. The dilatation of the strictures by means of elastic catheters and rectal bougies, as universally recommended, was by no means as easy as was made to appear, nor had the danger been fully realized which sometimes arose from their use. Quite a number of cases of perforation had been put on record that had occurred under the use of such appliances. The walls of the rectum, immediately below the stricture, were usually found in a state of suppuration, covered with coarse granulations, which rendered the tissue soft and frail, so that even the most careful handling of bougies might not always be successful in obviating so serious an accident as perforation. But irrespective of the inefficiency and hazard of rectal bougies, there was another point in the treatment of strictures of the rectum which should be met, to wit, their return. Whether the treatment has been by dilatation alone, or by division and subsequent dilatation, there was a decided tendency of recurring stenosis. As in strictures of the urethra, the patient should be enabled, by proper and harmless means, to protect himself by their casual use. For these objects, Dr. Bauer had constructed the instrument. A mere glance will at once show its superiority over the bougie. In the first place, it had the bend of the rectum, and could, therefore, be more easily introduced; next, the amount of dilatation could be properly graduated; and lastly, the patient himself could handle it with perfect safety.

The principle applied in the instrument had been borrowed from the dilator of Rigaud Michélena, designed for the dilatation of urethral strictures, for which it never acquired general currency among the profession.



CROUP—TRACHEOTOMY—DEATH FROM HÆMORRHAGE CAUSED BY FENESTRA IN TUBES.

DR. SAYRE presented a trachea and bronchi from a child upon whom tracheotomy had been performed. He was called to see a female child, seven years of age, by Dr. McCune Smith on the 3d inst., the patient having, at that time, been sick for eleven days with croup. When Dr. Sayre first saw the case, the child was virtually in articulo mortis, and it was agreed, in view of the urgent symptoms, to perform tracheotomy at once.

The veins about the neck were enormously swollen, and had to be carefully pushed out of the way of the instrument. As soon as the tube was introduced, the child breathed easily and expectorated five or six inches of membrane. She was afterwards placed in a warm room, the

temperature being kept at from eighty to ninety degrees, and the atmosphere saturated with the steam of warm water. The patient was perfectly comfortable from Sunday until Tuesday evening, the respiration being easy, and the plasticity of the secretions from the trachea being destroyed by the vapor. At that time Dr. Sayre noticed a little blood upon the feather used to clean the tube, and from that circumstance was led to suspect that everything was not right. The next morning the inner tube was withdrawn by the father, when suddenly a gush of blood followed and the child died immediately.

The cause of death was found to be due to this fact—a large vein passed across the upper limit of the opening into the trachea, and became, in the first place, engaged in the fenestra at the upper portion of the tubes. Now, when the smaller tube was removed for cleaning purposes, all that portion of the wall of the vein which was situated in the calibre of the inner tube was cut off by the sliding of the fenestra upon each other. At the autopsy a considerable portion of the wall of this vein was found completely cut out. The lungs were found in a perfectly healthy condition, the trachea having almost assumed its natural aspect; in other words, the case would have been a successful one of tracheotomy had not the accident alluded to occurred.

DR. SAYRE remarked that he had performed the operation in all eight times, and five of the patients were then living. In connexion with the untoward result of what would have been his sixth successful case, he took occasion to condemn the use of fenestrated tubes as they are now generally constructed.

DR. BAUER was disposed to condemn the use of the tubes altogether, and to keep the opening patulous by other means. He was satisfied in his own mind that the simple irritation of the presence of the tube was sufficient to give rise to the complication of bronchitis, which had so often proved fatal in cases of tracheotomy.

DR. SAYRE did not believe that the irritation had anything to do with any bronchitis that might follow. He was convinced, too, that the bronchitis might be kept in abeyance and the tube perfectly free by the moist air treatment.

DR. JACOBI did not believe that there was any foundation in fact as to the connexion between the irritation of the tube and bronchitis, and in that connexion related a case of croup where, in cauterizing the throat, he had lost a piece of caustic in the trachea. An attack of coughing followed the accident, but otherwise the child seemed to be doing well. On the third day after it was attacked with bilateral pneumonia, of which it died. This pneumonia was, however, found to be due to old tuberculous infiltration, and not to the irritation of the nitrate of silver. The caustic was found in the right bronchus just below the bifurcation, the mucous membrane in that situation being destroyed, but the parts were uninjured beyond to a very considerable extent; in other words, there were no evidences of the foreign substance having given rise to the inflammation, which by the merest chance happened to follow the accident so closely.

HARVARD UNIVERSITY.—NEW PROFESSORSHIP.—It will be gratifying to all interested in medical education and the College, to learn that a professorship of the Physiology and Pathology of the Nervous System has been established by the Corporation, and that the greatest teacher in this branch of medicine of the day, Dr. E. Brown-Séquard, has been appointed to fill the Chair. This distinguished physiologist has, we are pleased to say, left London and fixed his residence permanently among us. We doubt not that this addition to the many advantages now offered by the medical faculty of the University, will be duly appreciated by students from all parts of the country in selecting their winter course of lectures.—*Boston Jour.*

American Medical Times.

SATURDAY, JULY 16, 1864.

REVISION OF FEE-BILLS.

It is becoming a common saying that "everything is rising but physicians' fees." The truth of this remark is every day more and more painfully evident. Every species of labor, whether mental or physical, is demanding a higher and higher premium, and every kind of commodity is rapidly tending to higher prices. This upward tendency is due to the depreciation of the currency, and though the advance of wages for service is fifty per centum, there is only a simple equalization of values when the income from labor and the outgo for living are balanced; that is, though the laborer now receives twofold prices for his services, and has to pay twofold prices for every article which he eats or wears, he does not improve his condition by demanding a larger salary, but merely maintains his former position in spite of the mutations of currency. The artisan who lives, as it is said, from hand to mouth, feels as sensibly the first fluctuations of prices as the thermometer the slightest variations of temperature. He cannot long endure any considerable difference between income and outgo, and therefore demands that the equilibrium be restored. Either he must have higher wages or the materials of subsistence must fall to their former standard.

But while labor promptly adapts the values of its services to the increased cost of subsistence, the medical profession plods on undisturbed, adhering to its old fee-bills, which amount now in fact only to about one-third the former rates. We hear few complaints among practitioners, though every one who continues to charge the same fee as formerly, but purchases at current rates, is gradually becoming impoverished. He is truly living much beyond his income, and will finally meet the fate of all "fast men." If his rate of charges remain the same, he has but these alternatives—either he must have a corresponding increase of business, or—bankruptcy. It is not difficult to convince any medical man of the truth of these statements, and nearly every one has within a twelve-month come by degrees to realize that they are decidedly applicable to his own case. While his income has remained the same, his necessary expenditures have largely increased.

It is a hopeful sign of the times that the question of self-protection is beginning to be agitated in our profession in various sections of the country. In some localities there is a decided expression of opinion in favor of raising the rate of charges for professional services. In one or two instances medical societies have exhibited sufficient manliness to revise their fee-bill, and have advanced the rate in a liberal manner. It is noticeable that this subject attracts more attention in the newer localities, as at the West, than in old communities. This shows a more progressive and independent spirit on the part of the younger members of the profession, and augurs well of the future character of the practitioners of the new States.

The truth is, medical men are the most meagrely paid for their services of any class of any community. They

are supposed to be liberally educated, and yet they are called upon to perform the most menial services. They have no hours of positive and undisturbed relaxation and repose either night or day. They have no independence in the choice of patrons, but must run to the call of the meanest as well as the best, the poorest as well as the richest. They are the common drudges to do all the hard labor, and that gratuitously, of every charitable institution. They expose themselves freely to every form of contagion, and meet death on every hand. And yet the reward for all this toil and self-sacrifice is little more than an "approving conscience." The truth is, medical men have never properly estimated the importance of their services, and have consequently placed an inferior, we might better say a degrading, pecuniary value upon them. For nothing is more certain than that the physician who places a high estimate upon his professional opinion, and never gives it without ample compensation, makes a better impression than he who takes small fees. The conduct of the former shows a proper degree of self-respect and self-appreciation, and that inspires respect and confidence in others. It is written, "All that a man hath will he give for his life," and such is the value which patients often attach to the skill of their medical attendants. This sentiment should be our guide in fixing a just pecuniary estimate of our professional services.

We put the question to the medical profession at large, if it should not now everywhere revise its "Fee-Bill," and increase its rates in common with the movements of every other department of industry? Aside from the necessity, there was never a more favorable opportunity. The country is rich; every class deals in cash, and is prompt to meet pecuniary obligations. But to be successful, every member must adhere with scrupulous exactness to the terms of the bill. It will not do to bind the younger members, who are struggling to obtain business, to a rigid adherence to the new and advanced rate of charges, and allow some older practitioner of the same vicinity to compromise with his patients, and finally charge according to the old rates. This dishonest course is sometimes taken, and even by apparently respectable men. The movement should be universal throughout the country, and be binding alike upon all.

MORTALITY IN HOSPITALS.

HOSPITAL construction and hospital location are attracting much and deserved attention abroad. The impression is gradually gaining ground that city hospitals necessarily have a much higher rate of mortality than those located in the country or at least suburban. The new King's College Hospital, London, is alleged to have as high a rate of mortality as the old, and the question is pertinently asked: "Is it, then, to be concluded, that all great sanitary efforts are quite unavailing in touching or removing the causes of the mortality of our city hospitals? Is it true that the causes which are effective in producing this city-hospital mortality are beyond the reach of sanitary science? Is it true that there exists in all large and crowded hospitals of cities, an atmospheric or some other condition highly prejudicial to the health of the sick, which is irremovable? Or, in other words, has the patient who enters a London or Parisian hospital for the purpose of undergoing operation or for lying-in, a less chance of recovery than he or

she would have in a provincial hospital—in a hospital situated in the country?" We do not doubt that the answer must be in the affirmative. And we are prepared for the logical conclusions which follow: "If it be determined, as the result of careful inquiry, that the mortality of patients in hospitals of crowded cities is greater than the mortality of patients in hospitals situated in the country; if it be determined that patients in city hospitals are necessarily subjected (by the mere fact of their being in city hospitals) to certain deteriorating influences, which are irremovable by any kind of sanitary artifices, then it most assuredly must follow that no patients should be treated in city hospitals who could with equal facility be treated in hospitals situated in the country. More than this: It follows, also, that all our city hospitals should become semi-country hospitals; that accidents and urgent cases alone should be provided for in city hospitals; that city hospitals, with their three hundred, and four hundred, and five hundred beds, should be reduced so as to meet the wants of accidents and urgencies only, and that the surplus balance of their beds should be sent into the country."

COMMENCEMENT OF LONG ISLAND COLLEGE HOSPITAL.

THIS young and flourishing school recently held its fifth annual Commencement, with a large and intelligent graduating class. The success which marked the progress of this school is strong proof that the union of didactic and clinical teaching has the warmest sympathies of the profession. The Long Island College Hospital was the first institution to inaugurate the new system, and she is reaping the just rewards of her bold innovation.

AN APOLOGY.

IN a recent number of this Journal there appeared a notice of a work on the Diseases of the Ear by a person of the name of MOSCHZISKER. The work is a compilation from the best authorities, but bears internal evidence of the irregularity of the writer. It belongs indeed to a class of books which we never presume to notice in the pages of this Journal under any circumstances. The review alluded to was inserted through inadvertence, and we take this occasion to apologize for its appearance.

Correspondence.

NOTES AND OBSERVATIONS ON MOVEMENTS OF THE ARMY OF THE POTOMAC DURING THE MONTH OF MAY, 1864.

Special Correspondence.

THE Army of the Potomac left the vicinity of Brandy Station, Va., and arrived on the south bank of the Rapidan fresh from winter quarters, whence it had marched about twelve miles, on the 4th of May. The troops, in first-rate condition and thoroughly equipped, encountered the enemy the following morning in the vicinity of Wilderness Tavern, when the 5th, 6th, and 2d Corps became successively engaged very heavily.

During the night of the 7th we moved by the enemy's right flank to Todd's Tavern, gradually shifting position until our centre rested opposite Spottsylvania C.H. On the 9th, the 5th and 2d Corps, with the 6th, were again engaged, the fight being continued heavily on the 10th, and resumed along the whole line on the 12th. During the night of the 13th the whole line was shifted, and our

army was swung round upon the enemy's right; but our intended attack, which was anticipated, was not made. On the 18th, Head-Quarters of the Army were directly opposite and within sight of Spottsylvania C.H., near which the 2d and 6th Corps suffered considerable loss in attempting to take some of the enemy's rifle-pits.

On the 21st the army moved again to the left, halting near Guinea Station, proceeding towards the North Anna river, where firing was commenced at the Ford near Chesterfield Station by the 2d Corps on the 23d. They occupied the left, and during the latter part of the day fought quite heavily; the 5th Corps on the right was also engaged about Jericho Ford, after which constant skirmishing was kept up by the 9th Corps and sharpshooters along the whole line until the 27th, when the troops made a forced march, and succeeded in crossing the Pamunkey at Hanover Town on the 28th without resistance. About four miles south of the river, however, the cavalry had a very sharp engagement, followed on the next day by indifferent skirmishes by the infantry.

On the 31st our extreme right wing fell back from Hanover C.H. about four miles, the left advancing with only slight loss. The aggregate number of wounded for the month treated by the medical officers of the Army of the Potomac on the field may be estimated at about —

Hospital System.—The usual system has been followed in the main. As soon as the line of battle becomes defined, the Medical Director of each Corps selects a site for his Corps Hospital, the location of which is communicated to his various Division Surgeons and Ambulance Officers. Firing having commenced, all the medical officers in a brigade detailed to remain with their regiments, establish themselves with their attendants and hospital knapsacks at the nearest place of safety, and generally close by a road where the ambulances are drawn up in line. This constitutes the brigade field-hospital. As soon as a man is wounded he is brought by stretcher-bearers to this point, where he is received by the surgeons, who look at him, meet any very great emergency, if necessary, and pass him quickly to an ambulance, in which he is conveyed two or three miles to the Corps Hospital. This consists of several hundred hospital-tents arranged according to brigades and divisions. All the medical and hospital and sanitary supplies, etc., are collected here; every officer is detailed to his special duty; and the entire establishment is as completely organized as a General Hospital. On his arrival the patient is met by a registrar, who records his name, company, regiment, etc., and directs the attendants to the tents of the command to which the patient belongs. At this hospital, as nearly as possible, every necessary operation is performed, and that by those only selected for their superior skill.

Recent Improvements.—One of these is in the formation of *Brigade Field-Hospitals*. Formerly each surgeon detailed to remain with his regiment wandered about alone, somewhere in the rear of his command, where he might meet an occasional wounded man straggling back to the rear, for whom he could do what any hospital-steward could perform equally as well; but should an important emergency present itself, he lacked the necessary assistance and appliances for the occasion.

In the *location of Corps Hospitals* the useful lessons taught at Chancellorsville and Gettysburg were evidently learned, and consequently during the present campaign they have been generally about two or three miles to the rear. There was an exception to this in the case of the 6th Corps Hospital, which, in consequence of a slight change of position in our lines, had to be removed precipitately during the middle of the night of the 7th, its different division hospitals having the disadvantage of being a great distance apart.

It seems highly desirable that the various division hospitals of a Corps should be near together. Any of them are then more easily found; and in case one of them runs short of supplies, the deficiency can at once be remedied from

those more replete. A proper distribution of patients is also more readily made, and a general supervision greatly facilitated.

During a battle the wounded, regardless of Corps, are apt to flock that way; they see the greater number of wounded travelling; they are therefore more apt to find their own hospital, if all the Corps Hospitals be on the same road. If they were as nearly as possible arranged in this way, about the most central main road leading to the rear, on which all the wounded will have subsequently to travel on their way to General Hospital *via* base of supplies, it would offer advantages in many respects over the present miscellaneous style of locating them.

Transportation.—After the battle at Wilderness Tavern the wounded could not be sent to Washington *via* Rappahannock Station, as intended, the enemy having destroyed the railroad at several points. Those who were not left behind had, in consequence, to be loaded up in army wagons, a limited number of ambulances only being allowed for the worst cases. They followed on in the rear of the army (a suffering train) until we arrived near Todd's Tavern. When they were duly rationed and sent on to Fredericksburgh, escorted by a regiment of cavalry, shelter was the first consideration for these poor fellows, and in a short time the city was packed with them. Buildings public and private, with all available storehouses, some even to the garret, were filled with them. After this, as successive trains arrived, the wounded halted in the city only long enough to be fed, and were then taken right on to Belle Plain, a total distance of about twenty-five miles. Thence they were shipped by steamboat to General Hospital at Washington, etc.

The use of wagons was rendered necessary, as the fighting was so continuous as to compel the constant use of the ambulances at the front. The wagons, too, on being unloaded, could be immediately reloaded with any supplies for the front with great economy to the service.

The wounded of the 9th, 10th, 12th, and 18th, were all sent this route *via* Fredericksburgh and Belle Plain. After reaching Guinea's Station, Fredericksburgh was left to the care of cavalry and gunboats until all the wounded were removed.

Port Royal became our next base, whither those wounded on the 23d, and subsequently on the banks of the North Anna river, were taken for shipment north.

After crossing the Pamunkey on the 28th, White House became our base of supplies. Our wounded of the 27th and 28th, and subsequently, were sent there, when a large receiving field-hospital was established. Its average distance from the various places whence wounded were taken is fifteen to twenty miles.

The Weather.—During the whole month the weather was remarkably auspicious—very warm, without those heavy cold night-dews so common to this region, making it rather desirable than otherwise to sleep in the open air; this fine weather was enhanced by occasional showers on the 12th to 16th, and 26th to 28th inclusive. By these kindly showers the wounds of many a neglected sufferer were mercifully soothed; and the brave picket, as he lay wounded and alone on the solitary contested ground between the opposing works, found merciful drops from angel hands where no other dare approach to cool his parching lips and bathe his heated brow.

Fredericksburgh.—Commissary supplies arrived from Belle Plain within about twenty-four hours, and medical supplies in about thirty-six hours after its occupation by our wounded. The use of this city as a hospital was fortunately discontinued as soon as hospital-tents could be erected in the vicinity. It afforded, however, a splendid opportunity to the Sanitary Commission, which it thoroughly improved. Its supplies were poured forth with an unsparring hand worthy of the benevolent hearts the Commission represents.

In the *field* the Commission seems to be more efficient than at any previous time, having one wagon constantly with every Corps hospital in this army. The Christian

Commission also has put forth its utmost efforts, and has sent a large number of devoted, hard-working men, who attend faithfully to the physical as well as the spiritual wants of the soldier as far as its limited means will allow.

Volunteer Medical Aid.—This was fairly supplied at Fredericksburgh, many of the ablest and most distinguished surgeons in the country having neglected a lucrative practice for many days, and devoted their time to this noble work.

The labor of such men has however, yet to be much more thoroughly utilized before the good they *would* do can be accomplished by them. Civil surgeons arrive at a depot of wounded. One is placed in charge of a hospital, and finds that, not being a commissioned officer, he cannot obtain supplies direct from issuing officers; that, having received them, he is entirely ignorant of the mode of managing a military hospital; add to this the absence of the usual conveniences he is accustomed to, and in nine cases out of ten he gets disgusted and leaves on the very first opportunity, especially if he came down simply with the idea of operating. Nearly all necessary operations are now performed on the field, and those that have been unavoidably neglected for a number of days, and been transported a long distance to such a place as an intermediate "depot" for wounded usually is, had generally much better be left alone until they arrive at General Hospital; consequently the class of volunteer-surgeons chiefly needed on such occasions is good, faithful men, who are able and willing to *toil* as dressers, remaining hard at work a long time after the more eminent operators have returned to their homes. This was painfully evident at Fredericksburgh. As medical officers know full well, dressing wounds from the battle-field is horribly disgusting work; therefore they look only for the *putriotic* amongst their civil brethren to volunteer for the purpose.

The only way to use volunteer aid to the best advantage on such occasions, is to have a medical officer in charge of each hospital, to whom the various physicians, nurses, etc., assigned to him may report; and everybody so reporting will then be put upon the special duty for which he is best adapted, or where he is most needed. It would seem that during this emergency a sufficient number of medical officers on duty in the North, whose duties might be performed by civilians there, could, in common with the general movement, be hurried to the front for this duty with great advantage to the service.

Considering the nature of the country we have occupied, the constant distance from our base, the frequent changes of position, and the continuous fighting which has marked the history of this campaign during the past month, the wounded have been as thoroughly provided for and as carefully treated as the most exacting could desire.

RECTUS.

Army and Navy.

CIRCULAR LETTER.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., June 24, 1864.

Medical Officers in charge of Hospitals are directed diligently to collect and preserve for the Army Medical Museum all pathological surgical specimens which may occur in the hospitals under their charge.

The objects which it is desired to collect for the Museum may be thus enumerated:

Fractures, compound and simple—fractures of the cranium.

Excised portions of bone.

Diseased bones and joints.

Exfoliations, especially those occurring in *stumps*.

Specimens illustrative of the structure of stumps (obliterated arteries, bulbous nerves, rounded bones, etc.)

Integumental wounds of entrance and of exit, from both the round and conoidal ball.

Wounds of vessels and nerves.

Vessels obtained subsequent to ligation and to secondary hæmorrhage. Wounded viscera.

Photographic representations of extraordinary injuries, portraying the results of wounds, operations, or peculiar amputations.

Models of novel surgical appliances, and photographic views of new plans of dressing.

Plaster casts of stumps of amputations, and models of limbs upon which excisions may have been performed.

It is not intended to impose on medical officers the labor of dissecting and preparing the specimens they may contribute to the Museum. This will be done under the superintendence of the Curator.

In forwarding such pathological objects as compound fractures, bony specimens, and wet preparations generally, obtained after amputation, operation, or cadaveric examination, all unnecessary soft parts should first be roughly removed. Every specimen should then be wrapped separately in a cloth, so as to preserve all spicula and fragments. A small block of wood should be attached, with the name of the patient, the number of the specimen, and the name of the medical officer sending it inscribed in lead pencil. The inscription will be uninjured by the contact of fluids. The preparation should be then immersed in diluted alcohol or whiskey, contained in a keg or small cask. When a sufficient number of objects shall have accumulated, the cask should be forwarded directly to the Surgeon-General's office. The expenses of expressage will be defrayed in Washington. The receipt of the keg or package will be duly acknowledged by the Curator of the Museum.

In every instance, a corresponding list or history of the cases should, at the same time, be forwarded to this Office. In this list the number and nature of every specimen should be clearly specified, and, when possible, its history should be given. The numbers attached to the specimens themselves, and the numbers in the list forwarded, should always correspond, and should be accompanied by the name and rank of the medical officer by whom sent. Every specimen will be duly credited in the Catalogue to the medical officer contributing it.

JOS. K. BARNES,
Acting Surgeon-General.

NOTE.—The following Medical Officers have been authorized to collect and forward specimens to the Museum from the localities in which they are respectively stationed:

Surgeon Lavington Quick, U.S.V., Baltimore; Acting Assistant-Surgeon George Shady, U.S.A., New York; Surgeon William Clendenin, U.S.V., Nashville; Acting Assistant-Surgeon L. K. Baldwin, U.S.A., Philadelphia; Surgeon M. Goldsmith, U.S.V., Louisville; Assistant-Surgeon P. S. Connor, U.S.A., New Orleans; Surgeon C. J. Kipp, U.S.V., Indianapolis.

GENERAL ORDERS, NO. 222.

WAR DEPARTMENT, ADJUTANT-GENERAL'S OFFICE,
WASHINGTON, D.C., July 4, 1864.

Medical Directors of armies in the field are authorized to employ, under contract as "Acting Staff Surgeons," Regimental Surgeons of two years' experience, who are specially recommended by their Medical Directors, and whose term of service has expired.

The rate of compensation will be the same as pay and emoluments of Regimental Surgeons, with use of one public horse and equipments and forage for the same.

By order of the Secretary of War:

E. D. TOWNSEND,
Assistant Adjutant-General.

CIRCULAR LETTER.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., July 1, 1864.

The following decision of the Adjutant-General, made on an appeal from the decision of the Medical Director, Department of Missouri, in refusing to furnish a complete record of sick, wounded, and deceased officers and soldiers, is published for your information and guidance:

"ADJUTANT-GENERAL'S OFFICE,
"June 10, 1864.

"The principle involved is this: No information must be given by any officer in the United States service to any person, under any circumstances, which can be made the basis of a claim against the Government for pay, pension, or other allowances, except it be given, as the Regulations prescribe, to the *Adjutant-General*, or proper officer of the *Treasury* or *Pension* Bureaux.

"Information of sick and wounded officers and men may be freely given to any one to allay anxiety of friends, and the bare fact of death may be communicated to relatives, but not *dates*, or any circumstances which would be required to be used in prosecuting claims. The parties interested must satisfy the *accounting officers* of the *Treasury* that they are legal claimants, and then this office will obtain and give, to those officers, all the evidence necessary to perfect the claim.

"These rules are to guard the Government, as well as lawful claimants, against frauds.

"E. D. TOWNSEND,
"Assistant Adjutant-General."

By order of the Acting Surgeon-General:

C. H. CRANF,
Surgeon, U.S.A.

ARMY.

ORDERS, CHANGES, &c.

ORDERS.

Medical Storekeeper Robert T. Creamer, U.S.A., is relieved from duty as Medical Purveyor at St. Louis, Mo., and will report to Surgeon D. L. Magruder, U.S.A., Chief Medical Purveyor of the West, at Louisville, Ky. The Medical Director, Department of the Missouri, will designate a medical officer to perform the duties of Medical Purveyor at St. Louis, Mo.

Hospital Chaplain William L. Mather, U.S.A., is relieved from duty at Louisville, Ky., and will report to the Medical Director at New York, for duty at Grant General Hospital, Willett's Point.

Surgeon Glover Perl, U.S.A., is relieved from duty at Cincinnati, Ohio, and will at once repair to Evansville, Ind., and relieve Assistant-Surgeon C. W. Daniels, in charge of General Hospital at that place.

Assistant-Surgeon W. C. Daniels, on being relieved, will report to the Assistant Surgeon-General at Louisville, Ky., for assignment to duty.

Surgeon John McNulty, U.S.V., is relieved from duty at Louisville, Ky., and will at once repair to St. Louis, Mo., and relieve Surgeon B. B. Breed, U.S.V., in charge of the Military Prison Hospital at that place.

Surgeon B. B. Breed, U.S.V., on being relieved, to report to the Assistant Surgeon-General at Louisville, Ky., for assignment to duty.

APPOINTMENTS.

M. J. Moore and W. P. Montague, U.S.A., D. P. Morgan and Joseph Coppack, U.S.V., R. N. Washburn, of Mass., G. G. Jordan, of Md., Chas. Morris, of Conn., to be Hospital Stewards, U.S.A.

DISCHARGES, DISMISSALS, ETC.

Hospital Chaplain S. L. Adair, U.S.A., honorably discharged, the hospital to which he was attached having been broken up.

LEAVES OF ABSENCE.

Surgeon C. C. Cox, U.S.V., for five days.

Surgeon J. H. Thompson, U.S.V., for fifteen days.

ASSIGNMENTS.

Assistant-Surgeon Thomas R. Pooley, U.S.V., to 6th Corps Hospital, City Point, Va.

Chaplain R. J. Ferree, U.S.A., to Lincoln General Hospital, Washington, D.C.

Chaplain W. H. D. Hatton, U.S.A., to General Hospital, Whitehall, near Bristol, Pa.

Assistant-Surgeon D. R. Brower, U.S.V., to General Hospital, Hampton, Va.

Surgeon Joel Seaverns, U.S.V., as Surgeon-in-charge, Hospital Transport "Des Moly."

Surgeon George A. Wheeler, U.S.V., to 9th Corps Hospital, City Point, Va.

Surgeon Jacob R. Lindlow, U.S.V., as Surgeon-in-charge, General Hospital No. 3, Nashville, Tenn.

Surgeon R. M. S. Jackson, U.S.V., as Surgeon-in-charge General Hospitals, Lookout Mountain, Chattanooga, Tenn.

Surgeon George Rex, U.S.V., as President Army Medical Board for examination of Surgeons and Assistant-Surgeons of Colored Troops, at St. Louis, Mo.

Surgeon J. B. Morrison, U.S.V., as Surgeon-in-chief, 1st Division, 15th Corps, Army Potomac.

Surgeon James D. Strawbridge, U.S.V., as Surgeon-in-chief, 3d Division, 15th Corps, Army of the Potomac.

Acting Assistant-Surgeon G. W. Edwards, U.S.A., to Hospital Transport "Atlantic."

Assistant-Surgeon George Derby, U.S.V., as Acting Medical Inspector, Department of Va. and N.C.

Surgeon A. H. Thurston, U.S.V., as Surgeon-in-charge, Grant General Hospital, Willett's Point, New York Harbor.

Surgeon D. P. Smith, U.S.V., as Surgeon-in-charge, Hospital Steamer "Atlantic."

Hospital Steward Thomas H. Booz, U.S.A., to Department of Washington.

Surgeon William Threlkeld, U.S.V., as Surgeon-in-charge, Sherman Hospital, Nashville, Tenn.

Surgeon F. Meacham, U.S.V., as Surgeon-in-charge, Depot Hospital, 23d Army Corps, near Allatoona, Ga.

Surgeon Alfred Wynkoop, U.S.V., as Health Officer, port of Port Royal, and Attending Surgeon Guard-ship "Dragon," Port Royal Harbor.

Assistant-Surgeon J. S. Ely, U.S.V., to 6th Corps Hospital, City Point Va.

Surgeon N. F. Malsh, U.S.V., to General Hospitals, Rome, Ga.

Assistant-Surgeon C. H. Pegg, 8th New York Artillery, to Convalescent Hospital, Camp Parole, Annapolis, M.D.

Hospital Steward C. F. Swallow, U.S.A., to the Department of the North-west.

Assistant-Surgeon J. A. White, U.S.V., as Treasurer, St James Hospital, New Orleans, La.

Assistant-Surgeon R. McGowan, U.S.V., as Surgeon, General Hospital No. 1, Chattanooga, Tenn.

Surgeon C. E. Swasey, U.S.V., as Medical Director, District of the Frontier, Fort Smith, Arkansas.

Assistant-Surgeon E. De W. Breneman, U.S.A., to 4th U. S. Infantry, Army of the Potomac.

Assistant-Surgeon G. P. Jaquett, U.S.A., as Surgeon-in-charge, General Hospital, Montpelier, Vt.

Assistant-Surgeon Thomas McMillin, U.S.A., as Surgeon-in-charge, Hospital Transport Baltic.

Assistant-Surgeon Henry A. Dubois, U.S.A., as Acting Medical Inspector, Cavalry Corps, Army Potomac.

Assistant-Surgeon M. J. Asch, U.S.A., to the Depot Hospital, City Point, Va.

Surgeon J. Simons, U.S.A., as Surgeon-in-charge, Officers' Hospital, Fort Wood, Bedloe's Island, N. Y. Harbor.

Surgeon William F. Edgar, U.S.A. (retired list), as Examining Surgeon, Medical Director's Office, New York.

Assistant-Surgeon William H. Forwood, U.S.A., as Surgeon-in-charge, General Hospital, Whitehall, near Bristol, Pa.

Assistant-Surgeon John H. Janeway, U.S.A., as Assistant Medical Inspector, 10th Army Corps.

Assistant Surgeon George N. McGill, U.S.A., as Acting Medical Inspector, Army of the Potomac.

Assistant-Surgeons Philip Adolphs and Bolivar Knickerbocker, U.S.A., to 2d Division Hospital, 5th Corps, Army of the Potomac.

Assistant-Surgeon W. F. Cornick, U.S.A., to Lovell Hospital, Portsmouth Grove, R. I.

MISCELLANEOUS.

By order of the Secretary of War, all slightly wounded and sick officers at Fort Monroe, Va., not absolutely requiring hospital treatment, will be ordered to report to Colonel Adrian R. Root at Camp Parole, Annapolis, Md., for temporary duty in connexion with the Convalescent Camp.

Surgeon James M. Laing, U.S.V., is sick at City Point, Va.

The authority heretofore given commanding officers of the Department of the East, Middle Department, and Department of Washington, to approve furloughs in the same manner as Commanders of Troops in the field, is extended to the Commanding Officers, Northern Department and Department of the Susquehanna.

NAVY.

Regular Naval Orders.

Surgeon Delavan Bloodgood detached from the *Dacotah* and waiting orders.

Surgeon H. F. McSherry ordered to the *Dacotah*.

Passed Assistant-Surgeon Jones detached from the *Chippewa* and waiting orders.

Passed Assistant-Surgeon W. R. Richardson detached from the Navy Yard, Portsmouth, N. H., and ordered to take passage to Key West, Fla., for duty in the East Gulf Squadron.

Assistant-Surgeon Charles S. Giherson ordered to the Naval Rendezvous, 14 State street, New York.

Assistant-Surgeon J. H. Clark ordered to the Navy Yard, Portsmouth, N. H.

The following medical officers have passed their examination before the Medical Board at Philadelphia, Pa.:

Passed Assistant-Surgeons Arthur Matthewson, Archibald C. Roades, Michael Bradley, Adrian Hudson, Newton L. Bates, James H. Tinkham, A. W. H. Hawkins, F. E. Potter, William C. Lyman, Edward S. Bogert, James H. Macomber, Edward M. Stein, H. D. Burlingham, Walter K. Seofield, Aaron S. Oherly, Grove S. Beardsley, W. R. Richardson, James S. Knight, Henry M. Welles, A. B. Judson, Ed. S. Matthews—21.

Volunteer Naval List.

Acting Assistant-Surgeon H. K. Wheeler detached from the *De Soto* and waiting orders.

Acting Assistant-Surgeon W. H. Wentworth detached from the *Nyawja* and ordered North.

Acting Assistant-Surgeon Woodbury J. Frost detached from the *Ohio*, and ordered to take passage to New Orleans for duty on the *Nyawja*.

Acting Assistant-Surgeon Stephen Cushing detached from the *Ohio*, and ordered to the Mississippi Squadron.

Samuel Holman appointed an Acting Assistant-Surgeon, and waiting orders.

Elisha Hall Bridges appointed an Acting Assistant-Surgeon, and ordered to the North Carolina.

Acting Assistant-Surgeon Foster Thayer detached from the *Ohio*, and ordered to the Kickapoo, Mississippi Squadron.

Acting Assistant-Surgeon J. R. May ordered to the Daylight.

Acting Assistant-Surgeon Samuel H. Weil detached from the West Gulf Squadron, and waiting orders.

Medical News.

THE Society for the Prevention of Cruelty to Animals (England) has offered a prize of £50 for an essay against vivisection in England, and 1000 francs for a similar one in the French language.—The number of medical men in England is decreasing.—La Pommerais, who poisoned Madam Rau with digitaline, was executed on the 9th of June in Paris.—

PROF. FERGUSON is delivering a course of lectures on the Prognosis of Anatomy and Surgery during the Present Century, before the Royal College of Surgeons of England.—MR. CRITCHETT has invented a Vectis Spoon for the extraction of cataract; it is a modification of SCARFF's spoon.

—A CASE of cure of an abdominal aneurism by pressure upon the artery on its proximal portion, is reported.—MR. ADAMS (London) recommends the application of India-rubber rings to the penis in the treatment of incontinence of urine in children.—DR. BROWN-SEQUARD has taken up his residence in Boston, and has been appointed Professor of Physiology and Pathology of the Nervous System in the Harvard Medical College.—

DR. BOWDITCH has resigned his place as Visiting Physician to the Mass. General Hospital, and Dr. CALVIN ELLIS has been appointed his successor.

—DE W. F. PECK, formerly of Bellevue Hospital, New York, has lo-

cated at Davenport, Iowa.—Dr. THEOPHILUS PARVIN, lately appointed Professor of Materia Medica in the Medical College of Ohio, has gone to Europe.—The Indianapolis State Medical Society met at Indianapolis May 17th; the annual address was delivered by Dr. Moffat; Dr. S. M. Linton was elected President.—Dr. BABBINGTON, of London, invented and employed a laryngoscope, very similar to the one now in use, as early as 1829; he called it the *glottiscope*.—The total loss by preventible diseases in cattle in England is estimated as high as £6,000,000.—Mr. SPENCER WELLS, of London, has just performed his hundredth case of ovariectomy; of these 66 recovered and 34 died.—SEÑOR COX, son of an English physician at Valparaiso, has discovered a pass across the Andes not over 2800 feet high.—Prof. ASA GRAY has offered his valuable herbarium and library to the University of Cambridge on condition that a suitable fire-proof building be erected for their reception.—Prof. MILLER of Edinburgh, author of the Principles of Surgery, died on the 17th of June at the age of 52 years.

AN ASSOCIATION OF AMERICAN OPHTHALMIC SURGEONS.—In accordance with arrangements previously made, a convention of gentlemen devoted to ophthalmological science and practice was held at the New York Eye Infirmary during the recent meeting of the American Medical Association.—Dr. Delafield, of New York, presiding, and delegates being present from various parts of the United States. It was voted to hold the first Annual Meeting in the city of New York on the second Tuesday of June, 1865.—*Boston Jour.*

MASS. GENERAL HOSPITAL.—The following changes have been made in the medical staff of this Institution. Dr. Bowditch, after a long and honorable term of service, has resigned his position of visiting physician, and Dr. Calvin Ellis, Adjunct Professor of the Theory and Practice of Medicine, has been appointed to fill the vacancy. It will be needless to say how much Dr. Bowditch will be missed, for few of the many who have received clinical instruction from him in their student days will forget the lessons, not only of skill, but of humanity, he taught, and how entirely the patients were made to feel that they could command his heart as well as his experience. Dr. Ellis has been connected with the Hospital for several years as pathologist, and we are glad to announce that the Trustees have advanced him to a place for which he is equally well fitted. Dr. Brown-Séquard has also been appointed one of the consulting board of the Hospital.—*Boston Jour.*

TREATMENT OF ANTHRAX BY PRESSURE.—Mr. O'Ferrall advises (*Dub. Med. Press*) compression in carbuncle: "The compression must be firm, and must begin at the periphery of the swelling, and gradually approach its centre. In the early period of the practice I was accustomed to apply a circular sheet or piece of brown soap plaster spread on leather or cotton cloth, leaving an opening for the discharge of the pus. This succeeded in many instances, but I found that a firmer support was necessary in order to give immediate ease to the patient. I therefore covered this piece with straps of plaster drawn tightly from the neighboring sound parts, and they by traction exerted a firm degree of compression on the swelling. When the skin of the sound parts is thus drawn together, it will, by its own elasticity in the act of recovering its position with respect to subjacent parts, produce a distinct and appreciable amount of compression on the swelling, which would, no doubt, if visible, be found to be paler, as occurred when pressure of the finger had been previously made upon it. Now this is exactly what we want, and this is what is required by the principle of maintaining and promoting the capillary circulation in the part. The dressing should be removed every day, and it is invariably observed by the dresser that the pus oozes freely from the centre during the process, and the slough begins and continues to project until it comes away altogether. It is not, however, to the shape or medication of the plasters that I attach any importance. Simple oblong strips of plaster can be made to effect the object, if applied so as to produce a steady, equal, and firm compression of the parts. I may add that in some localities, when the tumor was of small size, and traction of the sound skin not easily accomplished, I have found a coating of well-made collodion of considerable

service, producing, by its contractile properties, a nearly similar result."

COMMENCEMENT OF LONG ISLAND COLLEGE HOSPITAL.—The Commencement of the Long Island College Hospital was held July 1st, at the Athenaeum, corner of Clinton and Atlantic streets. The exercises were commenced with prayer by the Rev. Dr. Vinton. The customary oath was then administered to the graduates, after which Dr. Mason said:—The following named candidates, having sustained a satisfactory examination in the various branches of medical science before the Council and Faculty of this College, written an approved Thesis, and completed their term of study according to the law of this State, I therefore present them for the degree of Doctor of Medicine:—Orson C. Sparrow, Connecticut; William J. Smoot, Kentucky; Fred. H. Cotton, A.M., Massachusetts; B. M. Keeney, New York; Geo. A. Harrel, Kentucky; Samuel H. McIlroy, Indiana; George F. Wilber, New Hampshire; L. Edwin Johnson, Maryland; W. B. Hallock, New York; Joseph E. Woods, Kentucky; Edward L. Griggs, Connecticut; Treonian Haight, A.B., New Jersey; Russel D. Adams, Michigan; Albert Gilliam, Kentucky; Joel S. Conklin, Pennsylvania; William L. Henderson, Tennessee; Marcus A. Bogie, Kentucky; Charles H. King, Minnesota; William R. Taylor, A.M., New Jersey; William W. McCoy, California; William H. Sanders, Kentucky; Russel M. Booth, New York; Walter Kempster, New York; Samuel C. Johnson, Wisconsin; William F. Davis, Indiana; Jarvis S. Wright, New York; Nathan R. Simmons, Kentucky; Lyman L. Swan, Rhode Island; George F. Ayling, New York; John S. Dorset, Virginia; John H. Comfort, New York; Charles C. Norman, Kentucky; Isaac F. Shakerly, New Jersey; Charles A. Rother, Maryland; Andrew B. Kirney, New York; Edwin Hillyer, Pennsylvania; Henry J. Railton, New York.

After the diplomas were presented, Dr. Mason addressed them briefly. The address to the graduates was by Prof. J. C. Hutchinson. The Valedictory was by O. C. Sparrow, of the graduating class.

Rev. A. A. Willetts, D.D., said they wanted to raise about \$25,000 to put the Hospital upon a substantial basis. Brooklyn was the third city of the Union, and there was every reason which could induce its citizens to help forward the good work. Let those who had amassed wealth or possessed means but assist, and it would be a source of the highest pleasure to the givers themselves.

Dr. Vinton made a brief statement regarding the financial wants of the Hospital. About \$20,000 had been subscribed, and all that was wanted was for his fellow-citizens of Brooklyn to raise about \$4,000 more.

Rev. Dr. Storrs then briefly addressed the meeting on the same subject. He said that while it was true that each man in the community was indebted to his own profession, every man was indebted to the medical profession. Every man in Brooklyn who was able to give towards this Hospital fund ought to do it. He spoke of the time that the cholera was so prevalent, and of the heroic fidelity with which the gentlemen of the medical profession had devoted themselves to rescuing the lives of their fellow-men. He urged upon his fellow-citizens of Brooklyn to establish institutions of any kind that were beneficial in their influence. With our great surging population we needed public institutions, and he marvelled that men of wealth did not seize the opportunity to establish them. The claim made upon them was too modest; it ought to have been \$40,000 instead of \$4,000; they would then have an institution worthy of Brooklyn, and future generations would bless them for it.

Dr. Mason wished it to be understood that the College was in no need of funds; it was the Hospital alone which they wished to make worthy of the city, and for which funds were now asked. The College was quite able to take care of itself, and all they wanted was for the public to sustain the benevolent part of the institution. They wished to raise, in all, about \$25,000 for the hospital, of which over \$18,000 had been already subscribed.

Original Lectures.

OVARIOTOMY;

BEING AN ABSTRACT OF REMARKS MADE

By E. R. PEASLEE, M.D.,

BEFORE THE N. Y. ACADEMY OF MEDICINE, JUNE 15, 1864.

BUT the statistics are to decide the question whether ovariectomy is a justifiable operation; and I now refer to them. According to the table of Dr. Lyman of Boston, containing 300 cases, 57.2 per cent. were cured. Dr. Clay of Birmingham, out of 425 cases, finds 37 per cent. were successful. Dr. Fock of Berlin, out of 292 cases, finds 59 per cent. cured. Simon's statistics, confined to operations in Germany, show that out of 44 cases only 12, or 27 per cent., were cured. This, by the way, is very remarkable, and requires some explanation; while other surgeons save at least 2 out of 3, the Germans actually lose 2 out of 3. Of 162 cases collected by myself, and not previously collated, 65 per cent. were cured.

These statistics, sir, are very unjust in deciding this question, and compare favorably with the statistics of other large operations. But unfairly for ovariectomy, all the statistics of this operation, save those which I have collected, go back to the beginning. This is not the case with any other capital operation. In my statistics I have removed this element of unfairness by confining myself to the collection of cases which have occurred within the last four years, commencing with 1860. These, however, include many operations which have been performed by inexperienced operators—another cause of relative unfairness to this operation. If we confine ourselves to the recent experience of Spencer Wells, J. B. Brown, Tyler Smith, and some of the most successful ovariectomists of our own country, we find that even 82½ per cent. have been cured. What other capital operation can show such a result as this? And who will still assert, in view of it, that ovariectomy should not be recognised as a legitimate surgical operation?

II.—We come now to the consideration of the second question. In what class of cases is ovariectomy justifiable, and what are the particular circumstances on the part of the patient which tend to a favorable result for this operation?

I have shown in a previous paper that nothing but ovariectomy can exert any curative influence upon any solid or polycystic ovarian tumor. Again, in monocystic tumors no good effect can be expected from any kind of treatment short of tapping the sac and leaving the canula in the opening, or else by injections of iodine. These often fail, and the former method is sometimes even more dangerous than ovariectomy itself. The cases, then, in which ovariectomy alone is serviceable are cases of solid and polycystic tumors, and cases of monocystic tumors in which injections have failed to produce a good result, or where they could not for any reason be resorted to. These are the classes of cases (and they include perhaps $\frac{1}{3}$ of all cases) for the relief of which we must resort to ovariectomy if we do anything for their cure.

But what are the special circumstances on the part of the patient which tend to a favorable result? what to an unfavorable result? and what are those which forbid the operation? First, let us inquire what are the causes of death in the fatal cases.

According to my statistics, one-third die of peritonitis; one-fifth die of what is called pyæmia, but which is really septicæmia; one-sixth die of shock or collapse; and one-seventh die of exhaustion from two or three to twelve days after the operation. I could mention many other causes of death, but they constitute so small a proportion that I omit them.

AM. MED. TIMES, VOL. IX., No. 4.

In discussing this question we may arrange the various topics under the following heads:—

I. Duration of the disease. II. Health of patient. III. Size of tumor and thickness of abdominal walls. IV. Previous disease. V. Age, temperament, etc. VI. In regard to previous habits of body, etc., etc.

I. *Duration of Disease.*—One authority maintains that the shorter the duration of the disease the better for the patient, as she will be in better health. But I here speak of the actual duration of the disease, independent of its influence upon the health. A long duration of the disease tends to a favorable result. On the other hand, a short duration has in itself no unfavorable tendency; but a very rapid development is always of unfavorable import. The prospect is most favorable, other things being equal, when the disease has gone on very slowly.

II. *Health of the Patient.*—Some authorities think that the best time for the performance of the operation is when the patient is in robust health; but Dr. Tyler Smith and Dr. Atlee believe it best that the health should be slightly impaired. With this latter opinion I fully concur: for (1) peritonitis is less apt to complicate the result; (2) if we divide amputations into those performed for mere expediency and those for pathological reasons, we find, in case of the lower extremities alone, that of the amputations of expediency even 40 per cent. die, while only 12½ per cent. die from pathological amputations. If ovariectomy is performed while the patient is in full health, it is an operation of pure expediency, and the results are proportionately unsatisfactory as compared with those which belong to the pathological variety. (3) By delay time is gained, as I have before stated, for forming a clear diagnosis. Again (4), if the patient is in full health at the time you are consulted, all other things being equal, she may live for months, or even years, while if you perform the operation you risk her life at once. Dr. Tyler Smith always waits until the health is slightly impaired, and no operator has had better results than he.

What is the objection to delay? It is said that by delay an opportunity for the formation of adhesions is given. I have never been deterred by the existence of adhesions from operating, and have met them in every instance which have formed in this way. I have recently received a letter from Dr. W. L. Atlee, who had then performed his one hundred and first operation, and who says: "I think that adhesions, unless they are visceral, should not be regarded. Even if these exist, and cannot be safely detached, the adherent portion may be cut out of the sac and left attached to the viscus." He has thus left a portion of a sac the size of a hand in the peritoneal cavity without any bad results.

III. *Size of the Tumor and Thickness of the Abdominal Walls.*—The abdomen had better be as large at least as it usually is at six or nine months of pregnancy, because in that case the abdominal walls are accustomed to distension and the peritoneum is necessarily more tolerant of irritation, while at the same time there is less danger from overdistension from any tympanitis that may occur, or from any bad effects which might attend retching or vomiting. If the abdominal walls are more than an inch to one and a half inches in thickness, there will be great trouble in nicely coapting the edges of the wound. On account of the very thickness of the walls of the abdomen I came very near losing one of my patients, I having failed to bring in direct contact the inner-cut edges of the abdominal walls, there being thus left a granulating surface in that situation, the secretions upon which, of course, fell direct into the peritoneal cavity. This consideration also offers another argument in favor of waiting until some degree of emaciation occurs.

IV. *In regard to previous Disease.*—If there has been a tendency to diarrhoea, peritonitis, inflammation or irritation of the stomach, you will naturally anticipate unfavorable complications. The question also occurs whether ascites accompanying this disease is an unfavorable symptom? If

ascites comes on early, and there are no adhesions (and thus it usually prevents them), there is nothing unfavorable to be looked for from this complication. If albuminuria merely exists in consequence of renal congestion, it does not present an obstacle to the performance of the operation. But Bright's disease forbids it entirely. In regard to previous tapping, my statistics prove that it is not followed by any after complications, unless the patient is also very much exhausted by them.

If the menses have ceased so much the better.

V. Age.—The youngest patient operated upon by Dr. Atlee was 15, and the oldest 69. Both recovered. My statistics show that between the ages of 15 and 20 the prognosis is quite unfavorable; from 20 to 25 favorable; 25 to 35 unfavorable, but not so bad as before 20; 35 to 40 very favorable; 40 to 50 unfavorable; after 50 quite favorable.

The *single* recover better than those who are *married*, the ratio being about 72 to 59 per cent.

The *temperament* is a very important point to take into consideration. The patient should be hopeful and cheerful, but above all should have a confident expectation of recovery, and feel that you are just the man that will bring about such a result. She should also be possessed of the common necessities of life, and be exempt for the time from affliction and anxiety.

Those circumstances which forbid the performance of the operation are, organic diseases of the heart or other important organs, any extensive skin disease, and extreme depression of spirits.

Next, *III.* How shall the operation be performed? This subject may be considered under two heads—first, the preparatory treatment; second, the operation itself. Dr. Atlee for ten or fifteen days gives daily of perchloride of iron, and on the day immediately preceding the operation a full dose of castor oil, and gives a dose of opium the night before, and another immediately preceding the operation. For twenty-four or forty-eight hours before the operation he also prescribes liquid food. I have never resorted to any of these preliminary measures except the castor oil. I have, however, always kept the patient for two days before the operation upon milk porridge, for the reason that I have found that no gas is generated in the intestine from its use. After using the porridge I have found the intestines nicely collapsed, never inclined to protrude, and very manageable.

The operation should never be performed in a general hospital, and the room should always be airy and well ventilated. The time should be when there is no epidemic of any form, especially of erysipelas or hospital gangrene. The best season is neither in the extremely cold nor extremely warm months. It should generally be commenced some time in the afternoon and be completed by sunset, in order to enable the patient to have quiet sleep soon after, and at the usual time. The weather should be fair and clear; the temperature of the room should be 80° Fahr., with water evaporating.

I am in the habit, before handling the serous membranes, of smearing my hands with artificial serum, which pretty closely resembles the natural secretion of the peritoneum.* I prefer ether to chloroform, for the reason that the former never causes vomiting, in my experience. Dr. Clay states that chloroform does this.

The incision should always be regarded as explorative until it enables us to decide whether to finish the operation. We must reduce the sac by tapping, and then draw the sac out through as small an opening as possible. For this purpose an incision of three inches in length may suffice, though I have found it necessary in one instance to extend it to fourteen. You cannot find out the amount and character of the adhesions unless you pass the hand into the peritoneal cavity and the fingers around the tumor; and adhesions, when found, had better be overcome by tearing them with the fingers. For this purpose you may use any

amount of force required, being careful not to tear the sac. This, however, does not apply to adhesions which may exist to the stomach, liver, bladder, or larger intestines. Than to use any force, it would be much better simply to leave these adhesions attached as before explained. I should always tap the tumor with a fine trocar at first, unless I had already made up my mind to complete the operation for a certainty. If a large trocar be used, and the circumstances be such as to render a completion of the operation impracticable, it will be found very difficult to close up the opening thus made.

After you have made your incision, overcome the adhesions, and emptied the sac, you turn the woman on her side and the tumor rolls out, when you will see the site of its attachment. Then you apply a clamp or ligature, and cut off the pedicle. I should either use the double ligature or the clamp. I, however, prefer the former, as it is the surest way to prevent hemorrhage. Of the 162 cases which I have collected, there is not a single case of death attributed to hemorrhage. The advantage of the clamp is, that you can take it away entirely at the end of three or four days and allow the pedicle to retract within the abdomen. The wound may close, as is most frequently the case, around the pedicle. It is said that if the pedicle is returned, that portion of it beyond the ligature will slough off and fall into the cavity of the peritoneum and induce septicæmia; but there is not a single fact to substantiate such an assertion. The fact is, the end of the pedicle becomes atrophied and absorbed, and produces no trouble whatever. I have used eighteen ligatures in this way, but in no instance has there been the first symptom of septicæmia. When the clamp is used it not unfrequently drags upon the uterus and causes great pain, retching, and vomiting, and sometimes fatal prostration. I think, however, that I am warranted by very recent data in saying that the true way is to use a double ligature, cut it off close to the pedicle, and then close up the incision.

Before we close the incision we look at the other ovary. In three of my cases I found that I had to remove the second ovary; this, however, did not seriously complicate the operation, and they all recovered.

In regard to giving opiates, I am opposed to the general practice of narcotizing the patient after the operation. I think just enough of the drug should be given to overcome pain and restlessness and secure sleep, and *no more*. And in some cases only twenty-five drops of McMunn's Elixir during the first night is sufficient. In other cases 3 ij. may be required to produce such a result.

In regard to peritonitis you must recollect that the traumatic variety is less dangerous than is the idiopathic. In some cases bleeding from the arm has been successfully resorted to for the cure of this complication.

Septicæmia generally comes on from four to seven days, the patient dying in from seven to fourteen days. I have resorted to the injection of the peritoneal cavity in three such cases with success. The first case occurred in 1855; the patient had ascites with the ovarian sac, and at the time of the operation every particle of fluid was removed by means of sponges. The peritoneum, however, secreted more fluid, and she finally ran into septicæmia from its decomposition and absorption. I introduced a bougie into the incision and continued to inject the peritoneum regularly twice a day for a week, at the end of which time the patient began to improve. In Sept. '63, I had to do the same thing for fifty-seven days in succession. In the third case I resorted to injections three times a day for about twenty days, then twice a day for twenty or thirty more, making 135 injections in all in seventy-four days.

I can safely say that the three cases would have terminated fatally had I not resorted to that plan of treatment. The injections were of three kinds—simple warm water, a solution of common salt, and of the liquor sodæ chlorinatæ. I have omitted several important points, since I had decided to give a rapid summary, merely, of the paper I have prepared in a single evening.

* Chloride iodine 3 iv.; albumen 3 vi.; water 0 iv.

Original Communications.

DIFFICULT OBSTETRICAL CASES.

By GEO. T. ELLIOT, JUN., M.D.,

PROFESSOR OF OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN IN THE BELLEVUE HOSPITAL MEDICAL COLLEGE; OBSTETRIC PHYSICIAN TO BELLEVUE HOSPITAL AND THE LYING-IN ASYLUM; CONSULTING PHYSICIAN TO THE NURSERY AND CHILD'S HOSPITAL.

(Continued from page 4, vol. viii.)

CASE CXIV.—During the night of the 1st of May, 1863, I was twice called to patients who were dead before my arrival. One was an old man who had fallen dead in the street after vomiting a quantity of blood. The other was a multipara in her second labor, attended by two physicians, who sent for me. Her labor had commenced during the morning of the 29th of April, 1863, with rupture of the membranes and escape of waters. At 4 A.M. of the 30th the head was recognised to present, the posterior fontanelle believed to be directed to the left sacro-iliac synchondrosis. The head seemed to be unduly flexed, and the pains seemed to direct it towards the pubes. She remained in this condition until the evening of the 1st of May, during the whole of which time the pains continued strong and frequent. At this time a consultation was called and the physician sent for; could hear no foetal heart, but decided to turn. The woman had then vomited freely, but the fluid was not very dark in color. Proceeding to turn, he recognised: 1st, a small uterine perforation in front of the left sacro-iliac synchondrosis; and 2d, a strong, circular, uterine contraction above, which made the operation very difficult and gave him a great deal of pain. He also thought that the antero-posterior diameter of the brain was undersized. It should have been stated that the first child had been born living after a tedious labor. After more than half an hour's work, the Doctor brought the feet into the world, but could not deliver the head. When I arrived the woman was dead, and the husband decided—in my judgment very naturally—that mother and child should be buried as they were.

CASE CXV.—*Breech Presentation—Fillet after Death of Child—Paralysis of Sphincter Ani coexisting with Foetal Heart-Sounds.*

The late Dr. Winchell sent for me on the 11th of May, 1863, to Mrs. L., in labor with her second child. The first labor had been very long and tedious, and she had finally been delivered with forceps of a dead child. On this occasion the waters had broken at 5 A.M., May 11th, when a breech presentation was recognised, the sacrum being turned to the left sacro-iliac synchondrosis. Child male. Labor pains good. Woman very stout. At 8 P.M. the Doctor sent for me, saying that he thought that interference would be necessary to terminate the labor.

I found that the maternal passages were moderately dry, but not hot; maternal pulse and condition good; moderate amount of water in the bladder. *Foetal heart was beating, but the rectum did not at all contract when the finger was introduced within the sphincter.* Scrotum greatly enlarged. Breech entirely in the superior strait; movement of descent not completed.

The situation was in some respects peculiar. It was the first time that I had ever been able to recognise a foetal heart when there coexisted such paralysis of the sphincter; indeed, I had been accustomed to consider such entire paralysis as an evidence of foetal death. Interference was not needed for the mother's sake, and I gave it as my opinion that we could scarcely hope to deliver the child without mutilation; and that as the pains were good, we might better wait longer to see whether nature could do better. It seemed to me that the paralysis of the sphincter, although not an evidence of this child's death, was yet a strong evidence of its very exhausted condition, and gave but a feeble hope of its ability to live, though it were born

alive; and I could not avoid the conviction that, with the history of the previous labor, the duration of this labor, the size of the child, the size of the mother—padded as she was with fat—neither the hands nor the forceps would suffice to bring this child into the world.

Accordingly we separated, and the labor pains continued strong until 4 A.M., May 12th, when, as there had been no advance, Dr. Winchell gave her forty drops of McMunn's Elixir of Opium, and she had some sleep. At 10 A.M. I saw her, and found that there had been absolutely no advance. Maternal passages in good condition as to temperature and swelling. No foetid discharge. We decided to interfere, and I proceeded to introduce a fillet made of a strip of linen three inches wide and about twenty-eight inches long. This was well soaked in oil and folded so as to leave it about an inch and a half in width. Some five or six inches of one end being then rolled into a ball, I tried to pass it over the anterior thigh (left), but it was impossible to pass anything whatever over that thigh, so tightly was it pressed against the anterior wall. It was with a great deal of difficulty that I succeeded in getting it around the posterior (right) groin.

Dr. Meigs says in his "Obstetrics," 2d edit. revised, page 495: "The efficacy of its (the fillet's) action would be greatly enhanced by placing it upon the groin that is farthest from the pubal arch—but that is a feat of dexterity that can rarely be performed."

It was performed in this instance, but I do not see the advantage of choosing the posterior thigh. On the contrary, it seems most decidedly to me that, in obedience to the mechanism of labor, we should always seek to advance the anterior nates first, as is always done in a natural labor; and furthermore, that we can thus most successfully draw the whole trunk in the direction of the superior strait when the breech is situated therein.

We found it difficult to bring down the breech, and relieved each other in our tractions with the fillet, but neither fractured nor dislocated the bone, nor lacerated the skin of the groin. As the breech descended, it turned spirally, so that the right trochanter, which had originally been the posterior one, came out under the pubes. The second arm had to be delivered with a blunt hook, but was not fractured. The head was then found to be situated transversely, with the chin above the linea ileo-pectinea, and somewhat towards the left sacro-iliac synchondrosis. The child was dead. Forceps would have been inoperative if it had been living, as there was no room for their introduction; and the blunt hook having been securely fastened in the mouth by Dr. Winchell, he brought it down and delivered it. The placenta was on the anterior face of the uterus, and there was some hæmorrhage after delivery. Ergot and irritation of the inner part of the cervix caused contraction. The abdomen was so very stout as to cause some difficulty in manipulating the uterus. I believe that the mother did well, or I would have seen her subsequently.

In addition to the many excellent practical suggestions of old Benjamin Pugh, Surgeon at Chelmsford in Essex, regarding the management of pelvic presentations, original and converted, there is one of value which I do not remember to have seen quoted, but which has been of much assistance to me. It is well known that Pugh is entitled to the chief credit of the principle of conveying air to the child while the head is retained in the maternal passages; but the manipulation described on the next page of his work has either been much lost sight of, or not thought as well of by others as by myself. The left hand, to which he refers, is supposed to be engaged in supplying air to the child, the hand being kept hollow and two fingers pressing down the tongue.

When the head cannot be delivered he says—*Treatise of Midwifery*, London, 1754, p. 53:

" Keep your Left-hand still in its Place; never let that go; desire the Nurse or one of the most handy Women about you, to get upon the Bed, kneeling

close by the Side of your Patient, with her Face to you, and put her Hands under the Bed-clothes (but at this Time only a Sheet covers the Patient unless very cold Weather) down to your Patient's Pubis, with the inner part of her Arms turned to your Patient's Belly, then with your Right-hand feel externally for the Child's Head; and where the most proper Place is not exactly over the Pubis, but on each Side towards the Groin, there fix the Hind-part of the Palms of both her Hands upon the Child's Head, bidding her press down pretty strongly, you pulling the Child at the same time. . . . By this Method, joined to that of giving the Child Air, Experience has convinced me, that every operator will soon find the great Benefit of them, by saving a great many Children which otherwise would perish; for by this Method of Turning and the Assistance of my curved Forceps when Turning was impracticable, I have not opened one Child's Head for upwards of fourteen Years."

CASE CXVI.—Puerperal Convulsions—Forceps—Child born alive—Mother did well—Douche.

Dr. Bishop sent for me on the 14th of April, 1862, in the afternoon, to see Mrs. McD., a primipara, aged 19, who had been taken with puerperal convulsions in the morning, which had continued during the day without any interval of consciousness. The urine was markedly albuminous, and her mother stated that there had been great oedema of the feet and legs up to the waist for three or four months before her confinement. Her hands also had been so swollen that she had been obliged to remove her wedding ring. The foetal heart was beating, and the cervix was just sufficiently dilated to admit of the introduction of my forceps upon the head, which had not yet commenced to pass through the neck. Such dilatation as there was had been effected by the warm douche which Dr. Bishop had been injecting within and against the cervix. Accordingly both blades were passed within the cervix, upon the head presenting in the first position, and a living child was delivered of normal size. The head was of necessity marked; as, to draw the head through, and thus dilate the unyielding cervix, it had been necessary to bring the blades as closely together as was justifiable. The child was revived with some difficulty, but then seemed to do well, though it died on the second day. No post-mortem could be obtained.

The mother had many convulsions after her confinement, and did not recover her consciousness for twenty-four hours.

After this time she remained very anæmic and weak, and was obliged to keep her bed for three weeks, and then suffered from faintness when she assumed the erect posture. There were no symptoms of metritis, peritonitis, or material injury from the operation. Gradually, however, she regained her strength, became again enceinte, and miscarried at the end of the second month, in November, 1862. I saw her this spring (1864) in pretty good health, somewhat anæmic, but otherwise well.

At the time of the convulsions the urine was examined by Dr. W. H. Draper, with the following result:—

"Sp. grav. 1021, acid reaction. Under the microscope numerous casts, generally of the smaller tubuli; some of them are perfectly transparent; others have one or two coarsely granular epithelial cells attached, and others again are slightly granular, some of the granules having the bright, glistening appearance of oil. The bottle was not perfectly clean, and must have contained greasy matter of some description from the amount of oil found in the field of the microscope."

In this case the convulsions were as severe and continued as in the gravest class of cases. An examination of the urine many months after showed it to be perfectly healthy. Specific gravity, however, of the morning urine, 1016.

Since writing the above, Dr. Bishop has informed me that the patient is approaching the term of another pregnancy.

CASE CXVII.—Puerperal Convulsions—Safety of Mother and Child—Induction of Labor—History of Subsequent Labor.

Dr. Warner sent for me in February, 1860, to a case of puerperal convulsions, as associated with albuminuria, in a primipara, occurring towards the end of pregnancy. Before my arrival she had been leeches and purged. Labor had not commenced. We agreed that sponge-tents should be used, and the patient delivered with forceps as soon as possible. By these means Dr. Warner brought on the labor, and delivered the woman of a living child, which is now living.

Within a year this woman became enceinte again. She had not been able to nurse the first child, and during the earlier months of pregnancy the urine became again albuminous. By enjoining abstinence from meat diet and the use of Rochelle salts, Dr. Warner carried her safely through the confinement, the albumen having disappeared before the close of pregnancy. Many months after, chemical and microscopical examination of her urine gave no evidence of disease.

CASE CXVIII.—Albuminuria in a Multipara—Premature Birth of a Still-born Putrid Child—Mother did well.

Dr. C. L. Mitchell requested his patient, Mrs. C., to call at my office on the 3d of March, 1863, for my opinion. **History.**—Aged 44; first menstruation at 15; married at 23; first child in March, 1847; second child in 1850. During this pregnancy she suffered much from pain in the head and bloating. She was bled, and within twelve hours labor set in, and a premature seven months' child was born. At the close of her third pregnancy she made a misstep, and hæmorrhage set in. The hæmorrhage subsided and returned in a month, when she was delivered with forceps of a dead child. A miscarriage was followed by two normal confinements, and then a miscarriage (attended with much hæmorrhage, after which she remained "pale and bloated" for some time) preceded her present pregnancy. She was last unwell in August, 1862. Motion felt in January, 1863. During November, 1862, had inflammation of the right lung, and was threatened with miscarriage, but saved. Six weeks ago began to notice swelling in her ankles. This has increased and become general. Face and hands moderately puffy; the finger sinks deeply over the tibia. Within ten days there has been disturbance of the sight. Sees objects sometimes as through a fog; flashes of light and sparks before the eyes; sensation as of sand in the eyes; lachrymation. No disturbance of auditory nerve. Has "dizzy turns" sometimes in the day. Is liable to "a feeling of distress" coming from the umbilical region, and spreading over the whole body. Patient not in the least hysterical. Some difficulty in passing water, as in previous pregnancies; passed a great deal of water during the night before the bloating came on, and since then the quantity has diminished. Still has to rise four or five times in the night, but not so frequently as formerly. No nausea; appetite good; bowels natural. Purplish (vascular) spots have recently appeared on the face and neck.

Dr. A. Flint, Jun., made two examinations of her urine, and found the reaction faintly acid. Sp. grav. 1015; albumen very abundant. There were scales of pavement epithelium; leucocytes in abundance; granular and waxy casts.

I recommended abstinence from meat and stimulants, but nourishing diet; leeches behind ears or nape of neck for threatening cerebral congestion; bloodletting, if such symptoms showed themselves. Premature labor at time of foetal viability, and before if complications occurred. Salines; skin to be kept active; chloroform for labor.

On the 15th of April, 1863, I received the following letter from Dr. Mitchell:—

"I think that Mrs. Cushing's child is dead, and has probably been so for a month past. Swelling of limbs has subsided; enlargement has lessened; and no sign of life has been manifested. Under the use of the bichloride the crushing pain in the head has ceased, the albumen in the

urine greatly diminished, sleep and appetite much improved. . . . Trust that all things may terminate more favorably than at one time we had promise of."

On the 18th of April, 1863, Dr. Mitchell sent me the following note:—

"Mrs. Cushing, after a half hour's labor of not over five pains, was delivered just now of a fetus that had evidently been for a long time dead—at least one month."

I have received to-day (July 8th, 1864) the following memorandum from Dr. Mitchell:—

"In subsequent examinations of Mrs. C.'s urine, scarcely a trace of albumen was found. She is now living in the country, and, I believe, enjoying excellent health."

AN OBSCURE AND INTERESTING CASE.

By O. H. SMITH, M.D.,

OF NEW YORK.

Miss T.—, of Brooklyn, aged seven years, of good constitution, returned home from school Sept. 25th, 1853, with pain in the bowels; most severe upon the right side. She had been jumping from a high stoop with other children at school, but had not fallen to hurt herself. Her pain increased till the 27th, when I first saw her. Found her with small and frequent pulse, furred tongue, constipation, with nausea and vomiting. Both thighs were flexed upon the body; abdomen distended and tender upon pressure; more marked over the right hypochondrium.

Ordered calomel and opium, to be followed by castor oil. 28th.—No operation, and no improvement in symptoms. Ordered leeches to abdomen, and continue calomel and opium. 29th.—No progress; fever high; skin hot and dry; pulse 160, and small; distressing pain in the bowels, which returned in paroxysms; abdomen tympanitic, with delirium. Continue calomel with *full doses* of opium, and apply a large flaxseed and camphor poultice over the whole abdomen. 30th.—Fever abates, pain considerably relieved, and less nausea and vomiting. Ordered castor oil and injections, to be repeated till the bowels move.

Oct. 1st.—Had two fluid evacuations resembling coffee-grounds. Symptoms are better; pulse 140 and fuller, and no vomiting. The little patient, from the first, had inclined her body forward and to the right side, and now the right thigh is firmly flexed upon the pelvis. Here I examined more carefully the abdomen, and found a tumor, exceedingly tender to pressure and deep-seated, immediately below the false ribs, and about four inches to the right of the umbilicus. Ordered flaxseed poultice over the tumor, and gave Dover's powder to relieve pain and procure rest. 4th.—Patient has had, since the last date, one or two fluid stools per day, more or less mixed with blood; tongue clean, and becomes red and shining; pulse 130 to 140; tumor increases in size; pain in the bowels, sometimes severe; urine scanty and high-colored. Continue Dover's powder, with sweet spirits of nitre. 8th.—Fever gradually subsiding; two or three small evacuations a day, and all tinged or mixed with blood. Continue treatment, with mild diet. 13th.—Very little change in symptoms; tumor gradually enlarges, but presents no appearance of suppuration. 14th.—A large-sized clot of blood passed the bowels with considerable pain. 19th.—Tumor continues to enlarge, while the abdomen flattens and is not so tender to the touch; the body still much inclined forward and to the right; the thigh not so firmly flexed upon the pelvis; the patient sits up in bed and tries to stand, while the right limb takes almost precisely the position common to "hip disease." 20th.—Patient had a large and painful stool, with immediate removal of the tumor.

Upon examining its contents, a large and ragged piece of membrane was found, which had the appearance of a half-organized or half-disorganized diphtheritic deposit. From this time, twenty-five days from the attack, the patient convalesced rapidly, and is now a beautiful young lady of eighteen summers.

My friend Dr. Willard Parker was in consultation with

me about that time in another case, and I showed him this singular specimen. He examined it minutely, and was desirous of taking it home and submitting it to a microscopic examination. He did so, and afterwards sent me a note, saying, "it proved to be a portion of the colon, about six inches in length," etc. It will be seen at once that this was one of the *blind cases* that we are sometimes called upon to treat. I had not the slightest suspicion of the nature or character of the disease, and yet it went on to a most fortunate termination. The symptoms would no more indicate a *volvulus* than an abscess with more or less colic or peritonitis. The vomiting would not point to obstruction in the alimentary canal unless it became ster-coraceous. Here was a case of intus-susception, or intus-susception of the colon, with plastic inflammation uniting the two portions at the upper fold, while the invaginated portion sloughed and passed away per anum. The large size of the colon probably allowed the passage of fluid fecal matter while invaginated. The bloody stools were probably the result of division of the small bloodvessels of the intestine by suppuration, a process necessary to separate the inverted portion, that it might pass off. Cases are on record where portions of the large and small intestines have sloughed and passed away per anum, "the ultimate recovery of the patient *sometimes* being the result;" while sloughing of any considerable portion of the colon, with permanent recovery, is exceedingly rare.

NEW YORK, July 6, 1864.

A CASE OF ACUTE GLAUCOMA,

TREATED BY IRIDECTOMY AND DIVISION OF THE
CILIARY MUSCLE.

By A. M. ROSEBRUGH, M.D.,

OF TORONTO, C. W.

Mrs. H., æt. 55, of Stratford, was sent to me by Dr. Dixon, of Paris, C.W., November 12th, 1862. She had all the symptoms of acute glaucoma in both eyes—ocular tension, dilated pupils, neuralgia, etc., etc.; amblyopia almost total; could not count fingers. The left eye had been affected four weeks; the right but ten days. The vitreous humor was too hazy to admit of an ophthalmoscopic examination of the optic nerve entrance.

Nov. 12th.—Performed A. Von Graefe's operation of iridectomy, upwards upon right eye, and put her upon iodide of potassium. Some hæmorrhage into the anterior chamber. Nov. 17th.—Neuralgia in right eye quite relieved. Nov. 21st.—Can read No. 20 Snellen's type. Nov. 26th.—Left eye remains the same. Performed iridectomy upwards; hæmorrhage into anterior chamber. Dec. 10th.—Pain gone; can distinguish the cross-bars of the window. Right eye still improving. Jan. 20th, 1863.—Right eye quite well; can read ordinary print. Left eye not as well as had been two weeks previously. Found the eye still hard. Divided ciliary muscle (Hancock's operation) through the cicatrix of the iridectomy, and put her again upon pot. iod., which had been discontinued for four weeks. Jan. 1st, 1864.—A son of Mrs. H. reports that the last operation quite restored the sight of his mother's left eye, and that she now reads ordinary type without glasses. She had been using No. 10 convex previous to the attack of glaucoma. I must add, that it would probably have been more satisfactory had the iodide been omitted; I however attribute the good result to the relief of the intra-ocular pressure from the iridectomy in the right eye, and iridectomy and Hancock's operation in the left.

TORONTO, C. W., July 8th, 1864.

HOMŒOPATHIC DIAGNOSIS.—At a meeting of the Illinois State Medical Society, the members balloted on a case presented. "The result of the vote was as follows: psoriasis inveterata, 5; skin disease, 1; eczema rubra, 5; tet-ter, 1; rara avis in terra, 1; leprosy, 3; natrum muriaticum, 1; psora, 1; blank, 3; Persian leprosy, 2."—*Chicago Jour.*

Reports of Hospitals.

BELLEVUE HOSPITAL.

FRACTURE OF THE CLAVICLE.

THIS bone, when fractured, is less easily controlled by dressings than almost any other, and consequently the rule has been reparation with deformity, more or less, according to the seat of the fracture, and a variety of circumstances unnecessary here to detail.

Fox's apparatus, or some modification of it, is that which has here been in more general use than any other; in theory it is unexceptionable, but in practice it leaves deformed clavicles. All that it can accomplish is to support the shoulder upwards and backwards, but does not prevent the shoulder from approximating the mesian line by acting upon the axillary pad as a fulcrum, though the pad may be of some service in filling the axillary space. The idea of leverage by means of the humerus over an axillary pad sufficient to force the shoulder outwards, has long since been exploded, it being impossible thus to accomplish this indication because of the painful pressure upon the axillary vessels and nerves. We think that the shoulder can be retained in position upwards and backwards with more ease and efficiency by Sayre's apparatus than by that of Fox. Dr. Sayre takes one piece of adhesive plaster, five to six inches in width, and of sufficient length to extend from the humerus rather more than half way around the body, and applies it as follows:—Bring the humerus of the affected side parallel with the axis of the body. Elevate the shoulder to its normal position; now make one turn around the arm with the plaster, after which carry its free end around the body, making traction sufficient to pull the shoulder somewhat backwards, and apply the adhesive side smoothly to the integument; by this means the shoulder is carried backwards, and by the width of the plaster and the contiguity of the arm to the chest a considerable support is afforded in the upward direction. But the elevation of the shoulder is insured by a second strip of plaster of about the same width as the first, which is made to surround the forearm, flexed at right angles, and next to pass over the fractured bone, and adhere to the back as far down as the angle of the scapula. A pad may be placed in the axilla to fill the space, and for no other purpose. This dressing possesses all the advantages of Fox's; is more simple, easier of application, and less liable to displacement. But the treatment which affords the best results, and at present most in vogue at Bellevue, is the postural; this consists in putting the patient in the supine position upon a firm mattress, with a pad about a foot in length and five inches in thickness between the shoulders, in order that the greater weight of the chest shall rest upon the spinal column, leaving the shoulders to fall backwards by their own weight. By this method the muscles are all relaxed, and the parts before deformed and displaced are reduced by gravitation. It is indeed curious and gratifying to see a clavicle distorted and overriding, resume its normal length and shape after a few hours of recumbency.

We get some of the most perfect results in this way, discharging patients without the least shortening or deformity.

FRACTURES OF THE SHAFT OF THE FEMUR.

It was the custom, up to within three years of the present time, to treat all cases of fracture of the shaft of the femur by one of two methods—either the double-inclined plane, or some modification of Desault's splint. But since that time the double-inclined plane has grown into disuse, and the method of extension by the straight splint has been entirely superseded by the use of the weight and pulley at the foot of the bed for extension, and the weight of the body upon an inclined plane as the counter-extending force. It may be of use to describe this dressing more in

detail. The patient is placed upon a firm mattress; a strip of thick adhesive plaster, about three inches in width, and extending when doubled from five to six inches below the heel up to the seat of fracture, is first applied to each side of the limb, which is held in position by an assistant. We prefer to wet the plaster with turpentine to make it adhere, rather than soften it by the application of heat; the maximum of adhesion is thus obtained with this advantage—that you can apply it leisurely, and have it stick just as securely; a plaster moistened with turpentine may lie from five to fifteen minutes, according to the temperature of the apartment, before being used. After the application of the plaster, the foot is bandaged up to the ankle beneath, and thence to the point of fracture over the plaster. A thin piece of board of the same width with the plaster and about four and a quarter inches long, with a hole through the centre, is next fitted and secured into the loop below the foot, so that extension can be made without the evil consequences of lateral pressure over the malleoli. The extension is now accomplished by passing a small rope, with a knot upon its proximal end, through the hole in the foot-piece, and next over a pulley arranged in a standard which is fastened to the foot of the bed; the desired degree of traction is made by suspending weights from the distal extremity of the rope. The counter-extension is secured by either raising the foot of the bed between four and five inches, so as to make the body of the patient gravitate down an inclined plane, or by the use of a perineal band attached to the head of the bed. The latter method is that which is practised at New York Hospital.

The weights should not be applied until the plaster has become thoroughly dried to the integument, which requires several hours. The weight in pounds required in any given case must be left to the judgment of the surgeon. We have just treated a fracture near the middle of the femur in a healthy, muscular man, æt. 23, without any appreciable shortening, by a weight of twenty pounds over a pulley one and three-fourths of an inch in diameter. Splints of coaptation, made of a material that can be moulded to the shape of the limb, as pasteboard or leather, render valuable assistance by securing a certain immobility to the bones and soft parts, which in turn conduces to the ease and comfort of the patient.

This apparatus is never complained of by the patient, but instead, gives that ready and permanent relief which is so pleasing to the surgeon, who interprets it as reliable evidence of his success in meeting the indications of the case. We are not at present in possession of hospital statistics sufficiently extended to speak accurately of the average amount of shortening after this treatment, but very confidently assert that it is less than was formerly obtained, for the reason that the patient can endure any degree of extension which may be found necessary to bring the broken ends in apposition.

A WELL MERITED COMPLIMENT.—At the New York Hospital, during the past eleven months there have been admitted for treatment, several officers, and a large number of marines and sailors, from the Russian fleet, which has made our harbor its head-quarters during that period. On the 7th instant, a deputation from the officers, accompanied by the Russian Consul, visited the Hospital for the purpose of presenting to Mr. R. Roberts (the superintendent), a silver pitcher and salver, with appropriate inscriptions. The Consul made the presentation, and begged that it might be considered as a tribute of their grateful remembrance of the unceasing kindness and attention of the superintendent to their sick and suffering sailors. The silver service is in the best style of Tiffany & Co., and is of the value of five hundred dollars. As Mr. Roberts, though for many years connected with the Hospital, has but recently been appointed superintendent, it is a pleasant duty to record this testimony to his faithful discharge of his duties.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, January 27, 1864.

DR. A. JACOBI, PRESIDENT, IN THE CHAIR.

HYPERTROPHY OF THE CHOROID MEMBRANE.

DR. POST presented an eye which he had extirpated the week before from the person of a young boy twelve years old, who, six weeks ago, had been injured by the explosion of a steam boiler, which had thrown a quantity of dirt and stones in his face. As the result, one eye had been destroyed, the humors being lacerated. The stump remaining and being a constant source of irritation, and that irritation propagating itself to the other eye, it was thought best to remove it. The only point of interest connected with the specimen was an hypertrophied condition of the choroid membrane and ciliary processes.

DR. CONANT exhibited a small tumor which he had removed from the arm of a dispensary patient. It was supposed to be due to an hypertrophy of the chorion.

He presented a second specimen which illustrated the appearance of the corpus luteum. It was removed from a patient who suffered from an ovarian cystic degeneration of the opposite ovary.

REMARKABLE DEFORMITY CAUSED BY A BURN.

A third specimen exhibited by Dr. Copant, consisted of an amputated forearm which he had removed from a little girl who was presented at the dispensary, for the first time, during the month of September. She was then three years old; when an infant, her hand had been thrust into a kettle of boiling water and was severely burned—so much so, that she suffered for a long time from the immediate effects of the injury. The accident occurred during the month of March, 1861. When she was brought to the dispensary (Dr. Smith) the child was very much emaciated and exceedingly nervous, the result of the presence of a slough in the situation of the cicatrix upon the forearm. All the fingers were virtually gone, with the exception of the index finger and thumb. A poultice was applied to the slough, and tonics were administered in the hope of getting the general system to that point which would render the performance of a plastic operation safe and proper; the idea being to try and save the thumb and index finger instead of resorting to an amputation. But she gradually commenced to run down, when the forearm was removed as a life-saving measure. Subsequent to the operation she improved very satisfactorily and rapidly. The deformity of the hand was quite remarkable, the thumb being deflected back upon the dorsum of the hand in a very curious manner. Still, had the system borne up, as it was hoped it would, a very satisfactory result might have been obtained.

FRACTURE OF THE FEMUR CAUSED BY OSTEITIS.

DR. SAYRE presented a specimen of a fractured femur, removed from a female patient who was admitted into Bellevue Hospital on the 10th of December. She stated that three months previous she first had a slight swelling in her knee, attended with great pain, and that after a few days the swelling subsided, but the pain became fixed in the middle of the thigh. She remained in that condition until the day before her admittance, when she fell upon a slight irregularity upon the sidewalk, and fractured her thigh. The fracture was readily recognised, and Buck's apparatus was applied. On the tenth day after the injury Dr. Sayre discovered that the limb was very much swollen, and, from its general appearance, he was able to diagnose the existence of deep-seated pus. He took a long exploring needle and discovered an abscess at the point of fracture. A counter-opening was made on the outer aspect of the femur, and a considerable amount of pus escaped; still, from the appearance of a swelling upon the outer and posterior aspect, it was evident that all the matter was not

discharged. The patient gradually lost strength, and the case finally terminated fatally.

At the autopsy it was discovered that a fracture existed at the junction of the middle and lower thirds of the thigh. The proximal fragment, to the extent of almost three inches of its surface, was found very much enlarged as the result of osteitis, and was covered with osteophytes. The extremity of the distal fragment was similarly affected, but to a less extent. It was evident that the osteitis had existed previous to the fracture, and probably had a great deal to do in causing it. She was aged 19 years.

FRACTURE OF THE PELVIS.

DR. LEWIS A. SAYRE presented a specimen of fracture of the pelvis, and read the following history drawn up by Dr. Irving W. Lyon, House Surgeon, Bellevue Hospital:—Thomas Daly, æt. 38, admitted Jan. 17th, 1864, in a state of partial collapse. States that he was run over by a horse-car at 2 A.M.; thinks the car passed over the body in the pelvic region, and says that he feels the pelvic bones to be loose; the left forearm is crushed at about the junction of the middle with the lower third. He complains of a severe pain in the back and also in the chest, with difficult respiration; and if he stir the most exquisite pain is produced in the pelvic region, which he is unable to locate in any particular spot. He is unable to make water; catheter is passed, and about six ounces of bloody urine drawn off; the left leg being manipulated, produced a distinct crepitus near the head of the femur; but it was noticed that he raised the entire leg after it was put down, which was evidence that the fracture was not in the femur. He is having paroxysms of severe pain in the lumbar and pelvic regions every few minutes, and vomits occasionally. Pulse 92, and very weak.

Jan. 18th.—Much better, pulse 80 and of good strength, but continues to vomit; urine drawn off and found clear. Can take very little nourishment.

Jan. 19th.—Still better to-day; passes his water without assistance. Vomits occasionally, can take some beef-tea.

Jan. 20th.—No change.

Jan. 21st.—Arm begins to slough; is poulticed. Vomiting has ceased, he can urinate without difficulty; bowels very loose, and he cannot control them; pulse 84 and of good force; can take more food and is very cheerful, but cannot stir without the greatest agony.

Jan. 22d.—Complains of more pain in the pelvis and in the inguinal region; has not slept; pulse 110 and strong; he says he can feel crepitus in the pelvis now; takes wine and beef-tea; bowels still loose.

Jan. 23d.—His bowels are very tympanitic, so that respiration is difficult. Vomits everything. Says that he feels no pain. Pulse 120, and bowels do not move; tongue red and face anxious.

Jan. 24th.—No pain anywhere, but the abdomen distended to its utmost with flatus, and of uniform consistence to the touch; bowels moved at 11 A.M. Urine has to be drawn off; he vomits everything taken into the stomach; pulse 120, and by no means weak.

Jan. 25th.—Died this morning at 11 o'clock, eight days and nine hours after the accident.

Autopsy, twenty-two hours after death.—The integument of the left lateral and posterior aspects of the pelvic region was ecchymotic from the injury. The intestines were very much distended with flatus; the peritoneal cavity was empty of gas and fluid; the lower portion of the peritoneal cavity, including the pelvic lumbar and super-pubic regions, was very dark from sub-peritoneal ecchymosis; the kidneys and spleen were much congested; the pelvis was found to be fractured as follows:—The body of the os pubis on the right side was irregularly fractured, with some comminution from the edge of the acetabulum, obliquely inwards and backwards; the descending ramus was fractured transversely to its axis near its junction with the ramus of the ischium; the os pubis, on the left side, was fractured through its body transversely to its axis, and

with comminuted edges at about four lines from the lip of the acetabulum; its ramus was not fractured, but the ramus of the ischium on the left side was broken just below its junction with the ramus of the pubic bone. Neither of the iliac bones was fractured.

The sacrum was fractured on the left side from its upper to its lower edge, in a slightly curved line, the concavity looking outwards, the line of fracture beginning above nearer to the median line than its termination below; this fracture was a few lines from the lateral edge of the sacrum.

The sacrum was fractured on the right side, from about the same point above as upon the left side, but the fracture proceeded downwards and outwards, and terminated near the posterior inferior spinous process of the ilium.

The sacrum was also fractured transversely at about its middle.

The driver of the car stated that he felt the ear jolt as though it had run over a log or stone, and that the car contained over sixty passengers.

PROCEEDINGS OF THE WESTCHESTER COUNTY MEDICAL SOCIETY.

THE Westchester County Medical Society held its sixty-eighth anniversary meeting at the Orawampum Hotel in the village of White Plains, on Tuesday, June 21st, 1864. In the absence of the President, Dr. Snowden of Peekskill, Dr. H. Fountain of Yorktown was elected President *pro tem*.

The proceedings of the last annual meeting were then read and approved.

The Censors reported Dr. G. A. Kretchmar as eligible to membership, his credentials showing him to be a graduate of the Medical School of Vienna, and of Bellevue Hospital College, session of 1863-4. He was duly elected a member of the Society.

The collection of annual dues and payment of bills was next in order; after which, Dr. G. J. Fisher, of Sing Sing, moved to amend the Constitution as follows:—

'That the Committee of Publication shall not exercise discretionary power in the publication of papers referred to it.

The following officers were elected for the ensuing year:—

President—Dr. Hosea Fountain, of Yorktown.

Vice-President—Dr. L. F. Peltan, of Newcastle.

Secretary—Dr. J. H. Curry, of Shrub Oaks.

Treasurer—Dr. H. Caruthers, of Tarrytown.

Censors—Dr. S. Shove, of Katonah; Dr. G. J. Fisher, of Sing Sing; Dr. G. W. Hodson, of White Plains.

Delegates to the American Medical Association—Dr. P. Stewart, of Peekskill; Drs. Caruthers, Fisher, Shove, Curry.

Delegates to the New York State Medical Society—Dr. E. S. F. Arnold, of Yonkers; Dr. T. Snowden, of Peekskill; Dr. J. H. Curry.

Committee of Publication—Drs. Curry, Stewart, Fisher.

Committee on Surgery—Drs. Shove, Fisher, Arnold, and Dr. Schmidt of White Plains.

Committee on Endemics and Epidemics—Dr. Stewart; Dr. C. W. Haight, of Pleasantville; and Dr. N. K. Freeman, of West Farms.

Committee on Indigenous Medical Botany—Dr. P. Moulton, of Mamaroneck; Drs. Fountain, Haight, Hodson.

Committee on Displacements and Diseases of the Uterus—Drs. Stewart and Fisher.

Dr. H. Caruthers was appointed to write a biographical sketch of the late Dr. F. G. LeRoy, of Tarrytown.

Dr. S. Shove was appointed to prepare a sketch of Dr. B. S. Miller, late of Pine's Bridge.

Dr. Shove, in the absence of a written report on surgery, related a number of cases that had occurred in his practice, viz. of staphylocorpy, in which cases he stated

that he preferred in this, as in all other operations, silk or thread to the silver-wire suture; of nasal polypi, in the removal of which he prefers a single-tubed canula to the ordinary double one. He also referred to a case of lithotomy by the lateral operation, and a case of tapping the bladder above the pubes.

Dr. H. Fountain related a case of intestinal obstruction from morbid growth, in which he asked the opinion of the members present as to the propriety of forming an artificial anus.

Dr. Caruthers related a case of rectal obstruction, caused by an almost solid concretion of blackberry seeds, which had become impacted in the rectum; the mass was removed after a slow and tedious operation, requiring to be literally "dug out."

Dr. Freeman related a case of obstruction of the intestines with cherries, which were removed by the free exhibition of Epsom salts and gum water; the cherries were merely shrivelled, notwithstanding they had been eaten five weeks previously.

Dr. Fountain made some remarks on the virtues of the root of *Hydrangea hortensis*, or common garden hydrangea, an infusion of which he has found of great value in ordinary cases of gravel. Also of the value of witch-hazel—*Hamamelis virginica*, as a sedative in cases of irritable bladder or uterus, or any form of pelvic irritation.*

Dr. Fisher exhibited a specimen of double monstrosity, which he denominated *Janus asymmetros*. The subject was a young pig, having four anterior and four posterior extremities; one head, with one symmetrical face, the lateral halves of which were contributed by each individual; on what would appear to be the back of this head were two extra ears and an imperfect proboscis—in short a merely rudimentary face. The bodies were united as low as the umbilicus, and separate below. A common thorax, with (in relation to the well formed face) an anterior and posterior sternum, etc. Dr. Fisher remarked that he is still engaged in the preparation of his monograph on double monsters, and made some general observations on the subject.

Dr. Fisher gave a verbal account of an operation for excision of one-half of the inferior maxillary. The subject was a lad ten years old; the caries had existed for two years; no anæsthetic was given; the jaw was divided with a jeweller's saw, between the left lateral incisor and canine; the periosteum was preserved, and disarticulation effected. Cause of caries not known; could not be traced to phosphorus. Dr. F. said his patient recovered in two weeks without an untoward symptom, and that very trifling deformity will result.

Dr. Fisher took occasion to differ with Dr. Shove in regard to the comparative value of metallic and thread or silk sutures. Dr. F. employed the metallic suture in most operations, regarding fine-drawn annealed iron wire nearly as good as silver; he found less ulceration from the use of metallic sutures; they could be retained longer; did not act as setons, etc. Dr. F. remarked that, in his opinion, they were generally placed too near the margin of the wound, and not carried sufficiently deep. The suture, when complete, should form a square, a parallelogram, or a triangle, but never a circle or oval.

Dr. Pelton related two cases of poisoning of children in consequence of eating the root of the wild carrot, *daucus carota*. In one of the cases it proved fatal; the boy was seven years old. Violent vomiting and convulsions, which terminated in death in ninety minutes after the ingestion of the root. The other child recovered after violent emesis and convulsions. An emetic was administered and the poison ejected.

The Society adjourned to meet at the same place on the third Tuesday in June, 1865.

* Vide *N. Y. Journal of Medicine*, Vol. X., p. 208, 1848: "Remarks on the Medicinal Properties of Witch-Hazel." By Dr. James Fountain (father of Dr. Hosea Fountain); also *U. S. Dispensatory*, Tenth edition, 1854, p. 1339.

Progress of Medical Science.

ON THE ACTION OF THE BROMIDE OF POTASSIUM IN INDUCING SLEEP. BY HENRY BEHREND, ESQ., ETC.

DR. GARROD, in his recent lectures on the British Pharmacopoeia, has mentioned that the bromide of potassium, when administered in large doses, produces drowsiness. I do not know whether the profession at large is aware of this fact, but as I have never previously seen any record of it (being indebted for my first information on the subject to the statements of Dr. Brown-Séquard), and as I have during the past twelvemonth had ample practical experience of its use, the following cases are submitted to demonstrate the value of the remedy in the treatment of insomnia and restlessness, accompanied by and dependent upon nervous excitement and irritability. If its employment upon a larger scale should confirm the results at which I have arrived (and of which Dr. Brown-Séquard has repeatedly assured me), its importance cannot well be overrated; as it is better borne than opium or any of its preparations, is free from the unpleasant effects—such as headache, constipation, etc.—produced by that drug, and the system does not so rapidly become accustomed to it as to require its administration in constantly increasing doses.

The first case in which I prescribed it was that of a gentleman 36 years of age, of highly nervous temperament, who had undergone much mental excitement consequent upon the dangerous illness of a very near relative. There was no constitutional malady present, and the only symptom was loss of sleep, and the debility, both bodily and mental, consequent upon it. He had not enjoyed a really good night for weeks, and this preyed upon him to such an extent as almost to preclude the possibility of his sleeping; for his mind was constantly intent upon this one subject, and never more so than when he retired to rest, so that it seemed as if the very effort to obtain sleep prevented its accomplishment. He was in very low spirits, and had failed in quieting the nervous system by opium in its various forms, valerian, and other antispasmodics and sedatives. He was recommended to take twenty-five grains of the bromide of potassium dissolved in a little cold water three times a day, before meals, for a week. At the end of this time he called to inquire if it was necessary to continue the treatment, as he had enjoyed several nights' excellent sleep, and had to a considerable extent regained his former cheerfulness and mental calibre. As he was still, however, somewhat nervous about his night's rest, it was thought advisable that he should not entirely give up the employment of the bromide; and he continued taking it once in the twenty-four hours, at bedtime, for a fortnight longer. He had now implicit confidence in the power of the remedy, and, what was of still greater consequence, was regaining confidence in his own powers of obtaining natural sleep, and he gradually ceased having recourse to the medicine. He always, however, kept a dose of it by his bedside, so that if he woke in the night and was tormented by the fear of not sleeping again, he might at once take it. During the last few months this fear has also left him, and he does not now use the bromide on the average more than once in three weeks. He sleeps perfectly well for six or seven hours at a time, and wakes comfortably and naturally, with entire freedom from the dread and depression which he formerly experienced on waking.

A second case, perhaps even more remarkably illustrative of the beneficial action of this salt, is that of a gentleman, 40 years of age, who consulted me in the month of October last. He was of a most excitable and nervous temperament, and was engaged in mercantile transactions of great magnitude, the extent of which indeed seemed quite to overwhelm him, although without any grounds as to fear of their ultimate result in a pecuniary point of view. He was quite unable, however, to banish them from his mind day or night; he had lost his natural sleep,

was harassed and fatigued during the day, and sought my opinion as to whether he ought not at once to withdraw from business, although the sacrifice entailed thereby would be very great, and he was most anxious to avoid it. I told him to place himself under treatment for a few weeks, and if no benefit were derived at the end of that time, such a step as he contemplated might be necessary. I prescribed the bromide of potassium as in the last case: twenty-five grains to be taken three times a day before meals. At the end of a week he was much better, slept naturally and well, and was consequently much more sanguine as to his capability of attending to his affairs. Good sleep having been procured, I thought it better to attend to the condition of the nervous system, and ordered the sulphate of strychnia to be taken in commencing doses of the thirtieth of a grain, to be gradually increased to the tenth of a grain, thrice daily. He was advised to have a dose of the bromide of potassium by his bedside, or to take one before going to bed, if he felt nervous about his night's rest; but since the first week of the treatment I do not think he has once found it necessary to have recourse to it. He sleeps perfectly well, has regained spirits and confidence, and has quite abandoned the idea of his unfitness to attend to his business transactions. He continues taking the tenth of a grain of sulphate of strychnia twice daily.

Other instances might be adduced of a similar character, but the above will serve as a type of the cases in which the administration of the bromide of potassium appears likely to be most useful—those, namely, in which the nervous element preponderates; and it is in these that, for the most part, opium and its preparations fail to produce any good result, and are not well borne by the system, frequently even adding to the excitement and irritability under which the patient labors. There can be no doubt, moreover, that cases of this type are unfortunately on the increase, since the highly artificial mode of life of the present day, especially in large cities, perpetually stimulates the nervous energy to the highest possible degree; so that even in the strongest constitutions the mental equilibrium is but too often shaken, and the weaker ones yield speedily to the excessive demands made upon them. The dose of the bromide recommended may appear large, but it is in all cases easily tolerated, and produces neither disagreeable nor toxic effects; the appetite is not interfered with, the alvine evacuations are regular and copious, and irritability of the bladder—a frequent accompaniment of restless nights—is greatly relieved. The only unpleasant result I have witnessed has been slight and temporary headache; and Dr. Brown-Séquard has informed me that he has given it with perfect safety for several successive weeks in drachm doses. Of the temporary paralysis, and weakening of sexual desire and power, which are said to follow upon the administration of large doses of the bromide of potassium, I have seen nothing. I should wish to try this remedy in the treatment of the restlessness of delirium tremens, but have not had the opportunity since I have become acquainted with its action upon the nervous system.—*Lancet*.

NEW METHOD OF USING CHLOROFORM.—At a recent meeting of the Chicago Medical Society, Dr. Bartlett presented a means of using chloroform, when its application must of necessity be frequent or immediate, as in convulsions, whooping-cough, neuralgia, labor, etc. He recommended it also as a matter of economy. By its use the chamber of the patient is kept comparatively free from the odor of chloroform, to many disagreeable or sickening.

Into a four-ounce gallipot, Dr. B. fits a cup-shaped sponge, retaining it in place by a transverse stay of wood. The anæsthetic being poured upon the sponge, the pot is placed inverted in a saucer containing a little water (or mercury). The tension of chloroform vapor not being great and it being sparingly soluble in water, but little is lost. The sponge may be successfully used hours after the pouring on of the anæsthetic.—*Chicago Jour*.

American Medical Times.

SATURDAY, JULY 23, 1864.

RESPONSIBILITIES OF PHYSICIANS IN CASES OF A CONFIDENTIAL CHARACTER.

THERE has been considerable attention recently given to the question of the responsibilities of physicians in the communication of medical facts of a confidential nature. The trial of a practitioner in France, guilty of betraying such a trust, and the verdict of the court against him, has added much interest to the discussion. The *Boston Journal* adduces an instance where a physician of great respectability has been subjected to persecution by a person who suspected the former had given an opinion unfavorable to his character. In a second instance a physician was importuned by the employers of his patient to divulge the nature of the disease; and on evading the inquiries, was informed that they had examined his prescriptions in the hands of the druggist, and found them of such a nature as to cast suspicion on his patient. Our Boston contemporary seems to regard the question of the duties of practitioners, under these circumstances, as so unsettled that it is advisable for the local associations to "vote as a body that they will not, under any circumstances, impart information when applied to in private, concerning *any* patient, in answer to an inquiry which implies suspicion of the moral character of such patient."

The obligations of physician to patient in matters of a confidential nature have been recognised and defined both by our profession and by writers on legal medicine. In this country the profession has been especially careful to establish the rule of conduct in such cases, and we cannot believe that any well educated physician has any doubt as to the nature of his duties. Every graduate is required to subscribe, either in language or form, to the famous code of professional morals embodied in the oath of Hippocrates, which contains the following:—"Whatever, in connexion with my professional practice, or not in connexion with it, I see or hear, I will not divulge, as reckoning that all such should be kept secret." This pledge has been incorporated into the text of every system of medical ethics from the days of its author to the present. We are not, however, left to this ancient inaugural oath for guidance; but the American Medical Association has defined explicitly and at length the relations of physician to patient. No American physician certainly needs to have his duties in confidential cases more clearly set forth. In Art. II., sec. 2, of the Code of Medical Ethics, is the following:—

"Secrecy and delicacy, when required by peculiar circumstances, should be strictly observed; and the familiar and confidential intercourse to which physicians are admitted in their professional visits, should be used with discretion and with the most scrupulous regard to fidelity and honor. The obligation of secrecy extends beyond the period of professional services; none of the privacies of personal and domestic life, no infirmity of disposition or flaw of character observed during professional attendance, should ever be divulged by him except when he is imperatively required to do so. The force and necessity of this

obligation are indeed so great that professional men have, under certain circumstances, been protected in their observance of secrecy by courts of justice."

When now we turn to examine the medico-legal aspects of this subject, we find the duties of the physician are changed. If it is necessary to answer the demands of justice, the medical witness is required by the common law to divulge in court information of a confidential nature acquired in the practice of his profession. FONBLANQUE says: "When the ends of justice absolutely require the disclosure, there is no doubt that the medical witness is not only bound but compellable to give evidence, ever bearing in mind that the examination should not be carried further than may be relevant to the point in question." In a celebrated English trial it was decided "that, in a court of justice, medical men are bound to divulge these secrets when required to do so." But on that occasion the presiding judge made the following pertinent acknowledgment of the moral obligations of the physician:—"If a medical man was voluntarily to reveal these secrets, to be sure he would be guilty of a breach of honor and of great indiscretion; but to give that information which by the law of the land he is bound to do, will never be imputed to him as any indiscretion whatever."

It has been contended, indeed, by able writers that, even in a court of law, where the testimony of the physician is important to meet the ends of justice, he ought not to be obliged to divulge confidential communications. BELLOC, an eminent French authority, says:—"The tribunals neither ought, nor have the power, to exact from a physician the revelation of a secret confided to him in consideration of his office; at all events, he may and ought to refuse." PROF. C. A. LEE, in his notes to GUY'S Forensic Medicine, takes the same ground. He says:—"We believe it to be the moral right and the duty of medical men to refuse to disclose in a court of justice secrets intrusted to them in professional confidence, and we have always acted on such belief. If physicians become the repository of secrets, under the full conviction, on the part of society, of our moral and professional obligations to hold them sacred—secrets which otherwise never would have been revealed—who can believe that there is any earthly power which ought to wring them from us, or which can, if we rightfully understand our privileges and duty? If private confidence is thus to be broken upon every imaginary necessity, where is the end to the mischievous consequences that would arise—especially at this day, where every trial is published to the world through the medium of the public prints?" Such reasoning has had its influence upon legislative bodies; and in some States the statutes have been so framed as to prohibit the physician from disclosing confidential communications. The following is the substance of this rule in New York, Missouri, Wisconsin, Iowa, Indiana, and Michigan:—"No person duly authorized to practise physic or surgery shall be allowed to disclose any information which he may have acquired in attending any patient in a professional character, and which information was necessary to enable him to prescribe for such patient as a physician, or to do any act for him as a surgeon."

In whatever light we view this subject, one fact is constantly prominent, viz. the moral obligation of the physician to retain inviolate all communications of a confidential nature is undisputed. By the Hippocratic oath he is not

to divulge what he sees or hears, whether in connexion with his professional practice or not. The code of ethics of the great governing body of this country pledges him never to divulge the privacies of personal and domestic life, or the infirmities of disposition or flaws of character observed during professional attendance, except when imperatively required to do so. It is only in courts of justice that the seal of secrecy can be broken, and even here the peculiar moral obligations of the physician are acknowledged and respected.

There is one further thought suggested by this discussion, and it is this: Every medical college should have a short course of lectures on the code of medical ethics of the American Medical Association. This code, a model of scholarly composition, embodies the elements of medical morality, and clearly enunciates the principles which underlie true professional greatness. The medical student is never referred to this unerring guide, and few even learn of its existence except by accident. We regard it as the imperative duty of those who assume the responsibilities of teachers to indoctrinate each graduate in every section of that code by means of special instruction.

SANITARY INSPECTION OF NEW YORK CITY BY MEDICAL MEN.

ONE of the most important enterprises ever undertaken by a voluntary organization is now in full operation under the auspices of the Citizens' Association of New York. It is nothing less than a full and accurate inquiry into the causes of disease in this city by competent medical men. The whole work is under the direction of the Council of Hygiene of the Citizens' Association. The city is divided for the purposes of inspection into thirty districts, and an inspector is assigned to each district. The manner in which the inspection is carried on will be seen in the following from the "Instructions to Inspectors:"—"It is recommended that each Inspector begin his examination at one corner of his district, and inspect a square at a time, the word square being here used, in a general sense, for any collection of houses bounded by three or more streets. This is considered preferable to following the line of any single street, and inspecting each side, because each square constitutes in itself a small sanitary district, and should be considered a distinct entity. Having completed the square, take the next one between the same streets, and so on, until the Inspector has reached the limit of his district, or the termination of the streets. Having completed this belt of squares, let him take the next series of squares lying parallel to it, and thus proceed until his district is completed. But it will be the duty of the Inspector, whenever he has information of the existence of fever, small-pox, or any special source of pestilence within his district, immediately to make a thorough inspection of the locality, in accordance with the forms provided for the Inspection of Insalubrious Quarters, and without delay to render said report to the Council of Hygiene. The chief points of inquiry are the following:—1. Nature of the ground; 2. Drainage and sewerage; 3. Number of houses in the square; 4. Vacant lots and their sanitary condition; 5. Courts and alleys; 6. Rear buildings; 7. Number of tenement houses; 8. Description of a single tenement [of a family]; 9. Description of a single tenement house; 10. Description of a row of tenements. These descriptions should state—*a*. Condition and material of buildings; *b*.

Number of stories and their height; *c*. Number of families intended to be allotted, and space allotted to each; *d*. Water supply and house drainage; *e*. Location and character of water-closets; *f*. Disposal of garbage and house slops; *g*. Ventilation, external and internal; *h*. Cellars and basements, and their population; *i*. Condition of halls and passages; *j*. Frontage on street, court, alley—N., E., S., or W.; *k*. Miscellaneous items; 11. Drinking shops, brothels, gambling saloons, &c.; 12. Stores and markets; 13. Factories, schools, crowded buildings; 14. Slaughter-houses [describe particularly]; 15. Bone and offal nuisances; 16. Stables, &c.; 17. Churches and school edifices; 18. Prevailing character of the population; 19. Prevailing sickness and mortality; 20. Sources of preventible disease and death; 21. Condition of streets and pavements; 22. Miscellaneous information."

The design of this inspection is to obtain accurate knowledge of the causes of disease in New York. The results will probably be embodied in a report to the Citizens' Association. It is important that the profession should aid this undertaking by giving information to the Inspector of the existence of causes of disease, and of the prevalence of pestilential diseases, as fevers, small-pox, &c.

QUESTIONS IN LEGAL MEDICINE.

THE following interesting case has recently been decided in the Paris Appeal Court: A man and his son entered the private clinic of M. DESMARRES, the distinguished oculist, and after a time the father lost both, and the son one eye, from purulent ophthalmia. The father prosecuted DESMARRES, claiming 10,000 francs as damages. It appeared on trial that the clinic was in charge of DESMARRES's son, a student of medicine. The suit before the Correctional Police failed, when the patient instituted a civil suit, placing his damages at 60,000 francs. The court declared that if, by any negligence of DESMARRES or his agents, the patient became the subject of contagious disease, or what was a curable and mild affection degenerated into an incurable and dangerous one, reparation could be obtained. To determine this point the court proposed to submit the matter to MM. NELATON, BEHIER, and RICHET, as experts, who should determine what were the diseases under which the patients labored when they entered the clinic, the nature and causes of the transformations they underwent, how far contagion had been operative, and whether the necessary care and skill had been bestowed. DESMARRES objected to such commission, alleging that it was now impossible for them to determine the nature of the disease under which the patients had labored. The Court of Appeal decided that a retrospective examination of treatment of a disease, the nature of which there is no proof of, is impossible to be made by the aid of experts and witnesses in a satisfactory manner. The case terminated, therefore, in favor of the defendant.

THE SURGEON OF THE PIRATE ALABAMA.

It turns out, as might have been anticipated, that the surgeon of the famous pirate-ship *Alabama* was an Englishman, and it so happened that he lost his life while endeavoring to save the wounded of the crew. This incident has excited the sympathies of the whole secular and medical press of England in the most extraordinary manner. The *Times* calls for a public subscription "to show England's gratitude to a man who has so nobly done his duty." The *Lancet* places his name "high on the scroll of fame;" "it belongs

to history." It urges upon the profession the subscription to a fund that shall have a national importance, wherewith to erect a fitting memorial to his memory. It believes that "his professional brethren throughout this kingdom are called upon to demonstrate their appreciation of such a man." With such bombastic phrases this journal eagerly strives to stir up a popular sentiment favorable to one who, throughout nearly his whole professional career, had been *particeps criminis* in the most wanton acts of piracy ever committed on the high seas. The last act of his life was certainly a most honorable one, and quite characteristic of the self-sacrificing spirit and devotion to suffering humanity of our profession. We give him all praise for that one act; but there is nothing in his previous career that will make his friends desirous of seeing his name recorded in impartial history.

Army and Navy.

ARMY.

ORDERS, CHANGES, &c.

APPOINTMENTS.

Isaiah L. Pickard, M.D., of Massachusetts, to be Surgeon 115th Regt. U.S. Colored Troops.

Drs. J. W. Hayward, of Massachusetts, Robert B. Brown, of Pennsylvania, A. B. Prescott, of Michigan, Corwin B. Frazer, of Michigan, John Fitzner, of Missouri, John T. Brown, of New York, and E. C. Malloch, of Maryland, to be Assistant-Surgeons of Volunteers.

Charles Mooney, U.S.A., G. W. Fisher and D. S. Weeks, U.S.V., and William A. Gately of Pennsylvania, to be Hospital Stewards U.S.A.

DISCHARGED.

Hospital Steward W. F. Tenlon, U.S.A., dishonorably.
Medical Cadet Charles M. Hunt, U.S.A., honorably discharged, to accept an appointment as Acting Assistant-Surgeon U.S.A.

LEAVE OF ABSENCE.

Chaplain C. A. Williams, U.S.A., for thirty days.

ORDERS.

Assistant-Surgeon Joseph E. Semple, U.S.A., is relieved from duty in the Department of the South, and ordered to report to the Commanding General, Department of the East.

Assistant-Surgeon Corwin B. Frazer, A. B. Prescott, and John Fitzner, U.S.V., ordered to report to Assistant Surgeon-General R. C. Wood, U.S.A., at Louisville, Ky.

Assistant-Surgeons J. W. Hayward and Robert B. Brown, U.S.V., to report to the Commanding General, Department of Virginia and North Carolina.

Assistant-Surgeon J. T. Brown, U.S.V., to report to the Commanding General, Middle Department.

Hospital Chaplain Dudley Chase, U.S.A., ordered to report to the Commanding General, Department of the Pacific, for duty at Alcatraz Island, San Francisco, Cal.

Surgeon Charles O'Leary, U.S.V., relieved from the operation of all orders requiring him to perform duty in connexion with the Provost Marshal General's Bureau, and ordered at once to resume his former duties in charge of General Hospital at Philadelphia, Pa.

Assistant-Surgeon Henry W. Davis, U.S.V., relieved from duty in the Department of Arkansas, and ordered to report to Assistant Surgeon-General R. C. Wood, U.S.A., at Louisville, Ky.

ASSIGNMENTS.

Surgeon James G. Hatchitt, U.S.V., as Surgeon-in-chief, Staff of General Burhridge, Commanding District of Kentucky.

Surgeon C. W. Jones, U.S.V., as Medical Director, 14th Army Corps, Army of the Cumberland.

Surgeon J. H. Grove, U.S.V., to Military Division of the Mississippi.

Surgeon H. P. Stearns, U.S.V., to report to Assistant Surgeon-General Wood at Louisville, Ky.

Assistant-Surgeon Elliott Coues, U.S.A., as Post-Surgeon, Fort Whipple, Arizona.

Acting Assistant-Surgeon John W. Beers, U.S.A., to Fort Goodwin, New Mexico.

Surgeon H. P. Stearns, U.S.V., as Surgeon-in-charge, Joe Holt General Hospital, Jeffersonville, Ind.

Assistant-surgeon William T. Okie, U.S.A., to report to the General Commanding, Department of the Ohio.

Surgeon J. H. Penbody, U.S.V., to Headquarters, District of Colorado.

Assistant-Surgeon Theodore A. McGraw, U.S.V., to General Hospital No. 1, Chattanooga, Tenn.

Assistant-Surgeon John Homans, Jr., U.S.A., to 1st Division, 19th Army Corps.

Assistant-Surgeon C. I. Wilson, U.S.A., to Lincoln General Hospital, Washington, D.C.

Assistant-Surgeon Clinton Wagner, U.S.A., to General Hospital, Beverly, New Jersey.

Assistant-Surgeon J. T. Calhoun, U.S.A., to 2d Army Corps Hospital, City Point, Va.

Assistant-Surgeon W. A. Curtis, U.S.A., to General Hospital, Hampton, Va.

Assistant-Surgeon Charles F. Brisbane, U.S.V., to Camp Parole Hospital, Annapolis, Md.

Assistant-Surgeon M. C. Woodworth, U.S.V., to General Field Hospital, Army of the Cumberland.

Surgeon Meredith Clymer, U.S.V., as Medical Director, Department of the South.

Surgeon David Stanton, U.S.V., as Assistant Medical Director, Northern Department.

Surgeon J. D. Knight, U.S.V., to Artillery Brigade, Department of West Virginia.

Surgeon Abraham L. Cox, U.S.V., to General Hospital, Nashville, Tenn.

Assistant-Surgeon Herman Loewenthal, U.S.V., as Surgeon-in-charge, 1st Division, 5th Corps Hospital, City Point, Va.

Surgeon Samuel W. Gross, U.S.V., as Surgeon-in-charge, Haddington Hospital, Philadelphia, Pa.

Surgeon George H. Hubbard, U.S.V., as Surgeon-in-charge, General Hospital, Troy, N.Y.

Hospital Steward J. Nebrich, U.S.A., to the Office of the Surgeon-General.

MISCELLANEOUS.

So much of Special Orders No. 166, current series, from the War Department, as relates to Assistant-Surgeon Alfred Kelser, 124th Indiana Vols., is so amended as to honorably discharge him, to date March 15, 1864, the day on which his regiment left the State.

So much of Special Orders No. 219, current series, from the War Department, as dismissed Assistant-Surgeon J. B. Green, 5th R.I. Heavy Artillery, for absence without leave, is revoked, he having been previously acquitted of that charge by a Military Commission.

Assistant-Surgeon Edward Cowles, U.S.A., is sick in 2d Division, 5th Corps Hospital, near Petersburg, Va.

Surgeon A. M. Clark, U.S.V., ordered to St. Louis, Mo., as witness before a General Court-Martial.

Assistant-Surgeon John C. Norton, U.S.V., is on sick leave at Rockford, Illinois.

NAVY.

Regular Naval Orders.

Assistant-Surgeon R. F. Edie, detached from the Mississippi Squadron.

Assistant-Surgeon Douglas R. Bannan, detached from the Mississippi Squadron.

Assistant-Surgeon S. B. Tuthill, resignation accepted.

Passed Assistant-Surgeon James S. Knight, detached from the Naval Asylum, Philadelphia, and ordered to duty in the Mississippi Squadron.

Surgeon James Luddardo, ordered to the Naval Asylum, Philadelphia.

Passed Assistant-Surgeon Michael Bradley, ordered to the Mississippi Squadron for duty.

Passed Assistant-Surgeon Walter K. Scofield, ordered to duty at the Naval Hospital, Norfolk, Va.

Assistant-Surgeon Charles H. White, ordered to duty at the Navy Yard, Portsmouth, Va.

Assistant-Surgeon Jer. R. Little, resignation accepted.

Volunteer Naval List.

Acting Assistant-Surgeon Atwood Crosby, appointed and ordered to the Ohio.

Acting Assistant-Surgeon John M. Whitney, appointed and ordered to the Ohio.

Acting Assistant-Surgeon John W. Shirfey, detached from the Morning Light, and ordered to the Pontiac.

Acting Assistant-Surgeon Max G. Raffle, ordered to the Fort Donelson.

Acting Assistant-Surgeon G. H. Marvin, detached from the Glencoe, and waiting orders.

Acting Assistant-Surgeon W. J. Simon, ordered to the Tunxis.

Acting Assistant-Surgeon H. M. Rundlett, detached from the Unadilla, and waiting orders.

Acting Assistant-Surgeon Hiram H. James, resignation accepted.

Medical News.

PROF. FLINT is about to publish a work on practical medicine.—PROF. WEBER, of Cleveland, O., is about to sail for Europe on business connected with the opening of a new school in that city.—The telegraph suture, introduced by MR. CLOVER, consists of a fine copper wire covered with gutta-percha, hence its name. It has been employed as an intercepted suture in hare-lip, leaving less scar than hare-lip pin. It is very pliable, can be knotted, and is as readily taken out as the silk ligature.—PROF. POPE, of St. Louis, recently removed a fetal skeleton of extra-uterine formation through the rectum, and the patient recovered.—PROF. CHAPMAN, of the Long Island College Hospital, received from the class an elegant gold chain.—An abridgment of Copeland's Medical Dictionary, brought down to the present time, is announced as in course of preparation under the supervision of its author.—PROF. LANGENBECK has been appointed Surgeon-General of the Prussian army.—PROF. SKODA has received the Grand Cross of the Guadalupe Order from the Emperor Maximilian I.—DR. ALFRED STILLE has been elected Professor of the Practice of Medicine in the University of Penn., in place of PROF. PEPPER.—DR. B. HOWARD RAND has been elected to the Chair of Chemistry in the Jefferson Medical College in place of PROF. BACHE.

Original Lectures.

LECTURES ON

GUNSHOT INJURIES OF THE ABDOMEN.

By FRANK H. HAMILTON, M.D.,

PROF. OF MILITARY SURGERY AND FRACTURES AT BELLEVUE HOSP. MED. COLLEGE, AND LONG ISLAND COLLEGE HOSPITAL; SURGEON TO BELLEVUE HOSPITAL; LATE MEDICAL INSPECTOR, U.S.A.

LECTURE VI.—PART VII.

Gunshot Wounds of the Bladder.

THE danger of this class of wounds depends especially upon the extravasation of urine. The urine may be extravasated into the cavity of the peritoneum, in which case, so far as we know, it is always fatal. If, however, the wound is received below, or outside of the peritoneal reflection, the extravasation takes place into the loose areolar tissue, and the results are not so uniformly fatal.

A wound received when the bladder is empty is the least dangerous to life, provided, of course, the wound is outside of the peritoneum. It must be remembered, however, that a ball cannot pass through the abdomen horizontally, just above the pubes, when the bladder is empty, without wounding the peritoneum; but that, when the bladder is in a state of distension, it may rise so far above the pubes as to leave a considerable portion of its anterior surface uncovered by the reflected peritoneum.

Again, the recto-vesical *cul de sac* formed by the peritoneum does not change its position materially when the bladder becomes distended and rises above the pubes; consequently a ball which penetrates the bladder only posteriorly and lodges, is more apt to enter the peritoneum than one which enters it only in front. A ball which passes through the body completely above the pubes, and horizontally, may not wound the peritoneum in front, but it cannot fail to wound it on the posterior surface of the bladder.

The symptoms indicating a wound of the bladder are pain, prostration, sometimes nausea and vomiting, but especially the passage of bloody urine by the wound or by the urethra. It is seldom that urine passes by the urethra unless through a catheter; and even then, owing to a large portion having already escaped through the wound; either into the cavity of the peritoneum or elsewhere, it is not usual to find more than a few drachms escaping by the catheter. There is, however, in nearly all cases, unaccompanied with injury of the spinal nerves, a constant desire to urinate, as if the bladder was actually distended with urine. In gunshot wounds we do not find the urine passing by the wound so early as in punctured and incised wounds. Indeed, it is not very usual to find urine passing by the wound after gunshot injuries until after suppuration or sloughing has taken place along the track of the wound. The urine may then pass continuously, or, as is more often observed, at short intervals or whenever the bladder contracts. In other examples the urine passes more or less freely by the wound immediately after the receipt of the injury, but its discharge is soon arrested by the occurrence of inflammation and swelling along the track, and it again passes by the same channel after suppuration has fairly set in.

The treatment is general and antiphlogistic, as in other wounds of the abdominal viscera; and local opiates ought to be employed freely, as they restrain the secretion of urine and quiet the pain and contractions of the bladder.

The local treatment consists first in the introduction of a flexible catheter through the urethra into the bladder. This ought to be introduced in all cases at the earliest possible moment, in order to prevent as far as possible any further extravasations of urine. The instrument selected

should be of the largest size which can be easily introduced, and constructed with large fenestræ. The precaution should be taken also to render it quite flexible before introduction by immersing it in warm water, so that when the stilet is withdrawn, its extremity may fall by its own weight into the bas-fond of the bladder. If no water escapes, the surgeon must apply his mouth to the outer extremity of the instrument and attempt to solicit its escape by moderate suction. Having been once introduced, it should be allowed to remain permanently, only withdrawing it once in two or three days to clean it out, and to prevent the accumulation of phosphatic concretions upon its surface. No catheter should be used longer than a week in this manner without substitution, as it always becomes a little roughened, and it is liable to become rotten and to break off within the bladder. If it causes much irritation it should be withdrawn a little, to ascertain whether the irritation is not occasioned by the extremity being pressed upon the coats of the contracted bladder; but if this does not give relief, it should be replaced by a smaller instrument or withdrawn altogether for a few hours.

In some cases it will be proper to enlarge the external and most depending wound, to secure the more free discharge of urine in this direction, or to introduce a flexible catheter through the wound into the bladder, or perhaps a long narrow fillet of cloth may answer the same purpose. The posture ought also to be such as will favor the discharge by the wound.

M. Legouest, to whose opinions I have already had occasion to allude so often while considering wounds of the abdominal viscera, recommends the employment of sutures here also, in all cases in which it is practicable to do so without exposing the patient to hazardous incisions. He recommends, however, that the sutures should not be permitted to drop into the bladder, as this would endanger the formation of calculi. For myself, I would prefer to reserve these operations for those examples alone in which the coats of the bladder are actually exposed, and for certain incised and punctured wounds hereafter to be considered.

I have already referred to the case of private Brownell, at present in the Central Park General Hospital, who received at the battle of Gettysburg seven wounds in various parts of his body; among these wounds were three made apparently by buckshot, which entered the abdomen above the pubes, and escaped posteriorly through the upper and lateral portions of the sacrum. Urine escaped from these wounds, both in front and behind, very freely for ten days, during which time no water passed by the urethra. On the tenth day urine ceased to flow through the posterior wounds, but continued to flow from the anterior wounds for six weeks. Several small pieces of bone have escaped from the posterior wounds. All of these wounds of the abdomen are now closed and have remained so for many months, the urine passing freely by the natural channel.

During the whole progress of the case no treatment was adopted having special reference to the injury of the bladder; the catheter was never introduced. It is quite certain that the shot did not penetrate the peritoneum. He is unable to inform me whether his bladder was empty or full at the time of the receipt of the injury.

Dr. Thompson, in his report after the battle of Waterloo, mentions fourteen cases which he considered in a fair way to recover.

In a large number of cases upon record, balls have lodged in the bladder and been subsequently removed by the usual operations made for stone. Mr. Ballingall, in his excellent treatise on Military Surgery, has collected nineteen of these examples; the first operation of this kind having been made as far back as 1698 by the celebrated lithotomist Frère Jacques.

Original Communications.

SPURIOUS PREGNANCY;

ITS SYMPTOMS, DIAGNOSIS, AND TREATMENT, WITH A RECORD OF CASES.

By EDWIN NESBIT CHAPMAN, A.M., M.D.

Prof. of Obstetrics, etc., etc., in the Long Island College Hospital, Brooklyn, N. Y.

(Read before the Kings County Medical Society.)

NINE cases of spurious pregnancy of a marked character having fallen under my observation, I purpose to give their histories, and venture a few remarks explanatory of the phenomena they presented. Doubtless most of the members of the Society have met with similar instances; and I hope, by a comparison of observations and opinions, we may arrive at a probable, or at least a plausible, explanation of the causation of this morbid condition, which simulates normal gestation so exactly as often to deceive the most experienced accoucheurs. A delusion of this kind may readily hold possession of the woman's mind in the earlier months, when a medical man even would be unable, satisfactorily, to clear up the doubts in the case, since he has nothing but sympathetic disturbances, aptly called signs, to guide him; but it is somewhat remarkable that this pseudo-pregnancy may advance step by step through all the stages of a genuine one, and apparent labor pains set in, when, lo! on examination, the uterus is found of its natural size, and the conception and attendant manifestations a *lusus nature*.

† CASE I.—M. S., æt. 42, the mother of twelve children and the subject of one miscarriage, applied at the clinique May 1, 1863, for the purpose of having it determined whether or not she was in the family-way. She supposed herself pregnant from the fact that her courses, unless interrupted by gestation or lactation, had never failed since their first appearance, excepting at two periods during the previous summer; but now her menses had been absent for the last five months, her abdomen had gradually enlarged, and for the last month she felt the movements of a child *in utero* precisely as in former pregnancies. The signs of this condition, however, by any change in the breasts were wanting; and the morning sickness, which always troubled her excessively when she was carrying each of her children, was absent. Her general health was excellent, and she had been latterly increasing in weight.

On examination, the uterus was found to be undeveloped and not affected with any disease.

There was evidently a considerable increase of fat in the abdominal walls; but, aside from this, no cause could be clearly discovered for the distension.

CASE II.—A. H., æt. 34, who was married, and had had six children and one abortion, sought advice at the clinique for a pregnancy, as she thought, which had prolonged itself beyond the normal period. Thirteen months ago her courses stopped for two months, but subsequently there has been regularly a very slight red stain. She has had morning sickness and feelings similar to those she experienced with all of her children; but there is no change in the breasts; they are undeveloped, and the areolæ and follicles are unchanged.

About three months after the cessation of the courses she discovered a tumor in the left iliac region that was movable, changing its position as she lay on one side or the other. This tumor seemed to her to increase in size continuously, and at present her abdomen is distended as though with a nine months' fetus. Shortly after the time above mentioned she felt life, and continued to do so, precisely as in her other pregnancies, to the period when she should have been confined. Now, in a disturbance with a drunken man, she was thrown violently and struck on her side against a trunk, with a force so great that a blood-mark, the size of the open hand, was formed. After this injury the

motions of the child became more and more feeble, and eventually ceased altogether in two weeks' time. Chills several times a day, coldness of the extremities, difficulty in evacuating the bladder, and dizzy, swimming sensations, were now experienced. On examination, no enlargement of the womb, morbid growth, or other diseased condition could be detected, only a distension of the abdomen from the bowels, which were very torpid and filled with gas and feces. There was a considerable deposition of fat in the cellular tissue; indeed the woman was corpulent and much above the average weight, yet she was markedly deficient in red blood, and was now, as the investigation showed, suffering from the symptoms of anæmia, which either originated the defective menstruation or arose from it. My experience teaches me that there may be a poverty in the red globules without its necessarily rendering the individual thin and spare, and that often there is this defect in persons grossly fat; also, that anæmia is frequently the cause of menstrual irregularities, and, *vice versa*, amenorrhœa is very many times the cause of anæmia.

The diagnosis in this case was scanty menstruation, which was supposed to be the occasion of the other morbid conditions.

CASE III.—Several years ago a woman called at my office to engage my services in her confinement, which was expected to come off in a couple of weeks. As on inquiry she lacked some of the more ordinary signs of pregnancy, I instituted a tactile examination, when the uterus was discovered to be undeveloped. Her disappointment was great at the blighting of her hopes. The particulars of this case I am unable to give, since by neglect I omitted making a record at the time; and I can recall nothing more in regard to it, excepting that she had been married about a year and was thirty or more years of age.

CASE IV.—In April, 1862, a married woman, aged 28, the mother of four children, and the subject of two abortions, presented herself at the clinique. She supposed herself near her time, as she was greatly increased in size, and had felt life for four and a half months. She applied on account of a severe flooding which had seized her three times. On examination, the uterus was found undeveloped and retroflected.

CASE V.—During the past summer, my friend Dr. J. E. Clark requested me to examine a lady who thought she had more than completed the period of utero-gestation. She had been married rather more than a year, and notwithstanding her courses were regular though scanty, she had for ten months been going through the phases of pregnancy, and experiencing the phenomena usually attending it, even to feeling the foetal movements. She had prepared everything for the hoped-for event, and now she suffered the preliminary but irregular pains of labor, that, starting from the lumbar region, passed forward and downward through the pelvis. She was very corpulent, her breasts were very large, but lacking the signs of gestation, and her abdomen was much increased in size and resonant. On examination, the uterus was found to be of the virgin size. The illusion of the lady was banished by aloes and asafetida, which unloaded the bowels and removed the flatus.

CASE VI.—On the twenty-seventh of last August I was called at eleven P.M. to see a woman at the Station House in Court street. On my arrival, I found the Captain of the police in attendance, who told me the woman was in labor, and that the waters had come away. I found she had severe pains about every five to ten minutes, like those of labor, which were attended with an expulsive effort, as we see in the second stage. It seems that she had had in the early part of the evening hysterical convulsions in Montague street, and was taken into a house by a lady. Subsequently she tried to make her way home, but was obliged to call a policeman to her assistance.

The examination revealing an undeveloped uterus, she was sent to the hospital, where on the next morning I obtained the following history:—A. K., æt. 17 years, had

only menstruated twice before her marriage, which took place ten months ago; but subsequently, for four "turns," she was "unwell" regularly and naturally. For the last six "periods" her "courses" have failed, excepting once four weeks ago. Until the suppression, her health was perfect, but afterwards she had nausea in the morning, sour stomach, etc.; but as the nausea went off, as it did in an hour or two, she felt well the rest of the day, and had a good appetite for dinner and supper. She had frequent, sometimes difficult, urination; a feeling of weight and pressure down the pelvis, particularly on walking; a sense of weakness through the back and hips, and a white vaginal discharge, but no pruritus or burning and scalding sensations. Her bowels operated mostly every day, and her abdomen was swollen and felt tender generally, but was more particularly sensitive over the stomach and edge of the liver. Her size, augmenting gradually for the last six months, has obliged her to let out her dresses. On examination, there is found no change in the breasts, no growth in the abdomen, and no development of the uterus. At the third day of her stay in the hospital, after being questioned in regard to foetal movements, she felt life, and continued to do so when she was dismissed. Two weeks subsequently, when she called at my office, she still persisted obstinately in the opinion that she was pregnant, and my professional dictum had no weight with her perverted and deluded imagination. The treatment consisted of cathartic doses of blue mass and aloes, which, bringing away retained feces and flatus, reduced her size promptly, removed the abdominal tenderness, and corrected the gastric and hepatic secretions.

CASE VII.—In September last, M. A., a married woman, forty years of age, who never conceived unless now pregnant, came to the clinique to learn what might be her prospects touching family matters. Unfortunately, four years ago her hopes were blighted when everything—a gradual enlargement of the abdomen to the nine months' standard, the development of the breasts, which secreted a milky fluid, and the movements of the child, which were felt for four months—seemed promising. Gradually the swelling disappeared, without any notable evacuation either of feces or gas. During this quasi-gestation she was healthy, had a good appetite, and a regular free state of the menstrual function. She now states that she began two months ago to enlarge again, and that she has the same symptoms as before, excepting the foetal movements and the secretion of milk. Her menses are regular and free, and were neither now nor on the former occasion interrupted.

On examination, silver lines were found on the abdominal walls, and flatus in the large intestines; but the uterus was of its normal, unimpregnated size. The treatment was the same as in the fifth case.

CASE VIII.—Mrs. A. L., æt. 36, married, the mother of two children, and the subject of one miscarriage, came to the clinique January last. Five months ago she was delivered of a false conception—a fleshy mass, with no appearance of organization, the size of the two closed fists. Excepting the stoppage of the menses for a period of four months, she had had no symptoms of pregnancy, and no feelings such as she formerly experienced when in the family-way. Her condition was one of debility and weakness, which were further increased by a profuse flooding that attended the discharge of the false conception. Her present symptoms are morning-sickness, weakness in the last lumbar vertebra, tenderness in the right iliac fossa, leucorrhœa, a greatly increased size of the abdomen, and an absence of the courses for the last four months, excepting a slight red stain three days since. She is tender over the margin of the liver, exhibits signs of hepatic torpor, and disorder of the gastric functions. She has not felt life, and experiences no darting pains through her breasts, which are unchanged in their size and in the color of their areolæ, though warmer than the surrounding parts and nodulated from the enlarged milk tubes.

On examination, the uterus was found to be of its natural size and free from any disease, and the abdomen to be very resonant.

She was ordered the following prescription: R. Hydrarg. chlorid. mit. gr. viij.; resinæ jalapæ gr. ij.; sacch. albi 3ss.; M. This was to be followed by castor oil in case it failed to operate. The evacuations by this cathartic were very dark, but there were no evidences of the bowels being distended by feces, and no wind was passed, although it was found on examining her again that the gas had left the intestines, and that the prominence of the abdomen had subsided. The calomel seemed to break up the chain of morbid sympathies and restore the digestive functions to their normal condition.

CASE IX.—Mrs. L. M., æt. 24, and married eight years, has during the last four years miscarried three times, but she never had a living child. She had been treated by Dr. C. by the speculum for six months without obtaining any benefit. For the last six months her menses, though regular and without pain, are extremely scanty—a mere red stain for one day. She has no leucorrhœa, urinary trouble, or itching, scalding, or forcing sensations in the pelvis, but suffers from great tenderness in the left iliac fossa, and a severe pain in the sacrum and last lumbar vertebra that extends over the left ilium and down the left leg posteriorly. This pain is increased by exercise, and relieved by lying down. She is slightly constipated, but her stomach is not disordered, and she takes her food with a relish. She has symptoms of pregnancy, shooting pains in the breasts, enlarged milk tubes, distinct follicles, and a light brown color of the areola. Six months previously she suffered severely from morning sickness, and had fainting fits, to which she is always subject during gestation.

By the touch the uterus was found prolapsed to the perineum, lying nearly in the axis of the excavation, excepting that the fundus was more backward and pressed under the promontory of the sacrum. The uterus could be readily elevated on the point of the finger, was not enlarged or congested, and its neck was not thrown forward.

By the speculum the cervix was found to be free from disease.

This patient, for a month and a half, took internally the pyrophosphate of iron, and used vaginal injections of alum; at the end of which time she felt very badly, and was obliged, from the intensity of the pelvic pains, to keep her bed most of the day. She had menstruated twice very freely, a week each period, and with great pain. The areolæ were of a deeper brown than at first.

The prescriptions were renewed, and on the following week a globe-pessary was introduced.

My notes state that she returned at the end of a month, felt much better, and was relieved of her troublesome symptoms by the use of the instrument. Whether the benefit was permanent is not known.

(To be Continued.)

REPORT OF A CASE OF SUCCESSFUL EXCISION OF THE ENTIRE OS CALCIS AND ASTRAGALUS.

By JAMES C. WHITEHILL, M.D.,

SURGEON AND MEDICAL DIRECTOR OF THE DEPARTMENT OF ARKANSAS.

PRIVATE — Roberts, 7th Battery, Wisconsin Artillery, had been wounded by a rifle-ball in the heel of the right foot at the battle of Parker's Cross Roads, on the 31st December, 1862. The ball grazed the tuberosity of the os calcis, and passed out through the sole of the foot, about two inches forward. He was brought to the hospital, and under the usual treatment the wound soon healed. The heel remained quite tender; the tenderness gradually increased; the integument became œdematous and glazed; the pain more acute and deeper seated; constitutional symptoms supervened; the wound reopened, and in spite

of all treatment the patient's condition had gradually grown worse. He had now hectic fever, some bronchial irritation, diarrhoea, and impaired appetite. The foot and ankle were swollen; the integument of the heel was an intense dusky or purplish red, tense and glistening; and three sinuses over the posterior part of the os calcis, with everted edges, discharged unhealthy sanious pus. Through these the probe readily detected carious or necrosed bone. After a careful examination of the case I determined to make an effort to save the foot by removing the os calcis, to which, from the location of the sinuses, I was in hopes the disease was yet confined.

April 1st.—In the presence of Surgeon H. W. Davis, 18th Ill. Infantry—at the time in charge of the General Hospital—Surgeon H. E. Foote, of the 18th Ohio Infantry, the Ward Surgeons of the Hospital, and several other medical gentlemen, the patient being placed comfortably on his side and anaesthesia induced, I commenced an incision at the margin of the sole, immediately behind the plantar artery, and carried it around the heel and along the outer side of the foot to the tarso-metatarsal articulation; and then keeping the knife close to the bone, dissected up the flap thus formed, and exposed the under surface of the os calcis. There was slight hæmorrhage from a posterior perforating branch of the plantar, but this was readily arrested by torsion. A perpendicular incision of about two inches was next made over the heel and along the tendo-achillis; the tendon detached from the os calcis, and the lateral flaps and soft parts carefully dissected up as far as the calcaneo-astragloid articulation, keeping the edge of the knife close upon the bone to avoid wounding the vessels, and if possible preserve a portion of the periosteum, which was much thickened, and in some places thickly studded with minute spicula of bone. The articulation was then opened, the inter-osseous ligaments divided, and the os calcis readily removed. The articular surface of the astragalus being diseased, the gouge was used for its removal, until finding the greater portion of the structure involved, I decided to remove the entire bone. Keeping the knife close upon the posterior surface of the bone, the dissection was continued to the ankle-joint, which was opened, when, by using the point of the finger as a lever, and at the same time a director and sheath for the knife, the bones were sufficiently separated to allow the ligamentous attachments to be divided by a cautious application of the point of the knife. The greatest caution being used on the inner side to avoid wounding the plantar vessels and preserve the periosteum, which at this point, like that of portions of the os calcis, contained a quantity of minute spicula or corpuscles of bone—a careful dissection was continued to free the bone from its remaining attachments, and the entire astragalus removed. Finding the other articular surface healthy, the wound was carefully cleansed, the parts coaptated, light water dressings applied, and a suitable splint so arranged as to *fix and retain* the foot and leg in their proper position, without interfering with the dressing of the wound. *No part of the integument was removed, nor did a single vessel require ligation.* Surgeons Davis and Foote, and several other medical gentlemen, by attending to the administration of the anæsthetic and affording other assistance, rendered efficient aid during the progress of the operation, which, from the large amount of careful dissection required in removing the astragalus, was necessarily somewhat tedious.

The subsequent treatment consisted mainly of a careful retention of the parts in position, simple water dressings, and a generous diet, with wine, ale, and porter. A free, healthy suppuration was established; the redness and tumefaction of the integument subsided, and the wound was gradually filled with healthy florid granulations. The following extract from a note just received from Asst. Surg. Washburn, 126th Ill. Infantry, at the time in charge of one of the wards of the hospital, will give a good idea of the appearance of the foot two months after the operation:—“Although he was not in my ward, as it was an unusual operation, I visited him the more frequently to witness its

progress. The parts healed kindly, and by the 1st of June were almost completely closed, and no one would have imagined that so formidable an operation had taken place. The appearance of the foot was natural, a new formation apparently having taken the place of the removed bone, leaving the configuration good; besides, he had some motion of the ankle, and it certainly promised to make him a very useful member of the ‘body corporate.’”

I regret that I have had no opportunity of seeing the case at a later date, or of ascertaining the amount of mobility of the joint retained, or the character of the “new formation,” whether fibrous, osteoid, or osseous.

I had hoped, by preserving a portion of the periosteum, to secure a re-formation, in part at least, of the bony structure—and have but little doubt, judging from the amount of reparative effort evinced by the ossific formation found in portions of the thickened periosteum, that such a result was actually obtained.

The case presents several points of practical and pathological interest. There can be no doubt that the success of the operation was to some extent dependent on the small amount of interference with the circulation of the part; as already stated, not a single vessel required ligation. The granulations by which the cavity of the wound was filled, presented a *striking resemblance to the medulla of young bone*. To what extent was the preserved periosteum concerned in the new formation, and what was its ultimate character? The thickening (“proliferation”) of the periosteum was by far the greatest in the vicinity of the larger bloodvessels, and the osseous spicula most abundant in the same vicinity. The ossific deposit or formation in several places extended some distance into the adjacent soft parts, and was sufficiently abundant to produce a grating sensation upon the edge of the knife. Without entering upon a discussion of the method or methods of the “*pathological new formation of bone*,” I will merely add, that it does not seem unreasonable to suppose that the “new formation” in this case was of an ossific character, and that the success attending the case is a strong argument in favor of “conservative surgery.”

In similar cases I should certainly look upon *excision as the rational treatment, and amputation the dernier ressort.*

CASE OF REFLEX PARALYSIS,

FROM GUNSHOT WOUND OF HEAD,

WITH SPONTANEOUS RECOVERY.

By WM. BADGER, M.D., ACT. ASSIST.-SURG. U.S.A.,

DE CAMP GENERAL HOSPITAL, DAVID'S ISLAND, N.Y.H.

DANIEL F. PRINCE, P., Co. H, 51st N.C., Rebel, æt. 18, admitted to this hospital June 15, 1864, suffering from gunshot wound of head and almost complete paralysis of one upper and both lower limbs. The wound, received at Cold Harbor, Va., June 1st, 1864, is a flesh wound on the top of the head, the ball grazing the upper border of the left parietal bone; several small fragments of the external table having exfoliated and come away since admission. Examination discovers the inner table apparently uninjured.

There being none in this hospital who witnessed the occurrence of the injury, I am obliged, for the time previous to his admission, to rely upon the statements of the patient, who is an intelligent young man. He states that immediately upon receipt of the injury he was insensible, remaining comatose for an hour and a half, as he has been informed. Upon recovery he was perfectly conscious of surroundings, and his memory is retentive of even the minute occurrences of the time. He found himself completely paralysed in the right upper and both lower limbs, and partially so in the left arm. There was no aphonia, and the special senses were unimpaired, with the exception of hearing, this defect being but slight. He remembers, however, a “queer taste which lasted about a week.” There was no emesis or other symptom resulting

from cerebral concussion, with the exception of sudden and obstinate constipation. The bowels had previously been free and regular, having had an evacuation a few hours before receipt of the injury, whereas for the subsequent fourteen days he had but two. He has experienced no difficulty whatever in the functions of the bladder. The accident has been attended with no pain, except in the right shoulder, and a slight headache in the supra-orbital region. The paralysis has been accompanied with a numb and dead sensation of the affected members, with a constant pricking as if the parts "were asleep."

Condition upon Admission.—The patient, when admitted to this hospital, was suffering from almost complete paralysis of the lower limbs and right arm. The left, having been but slightly affected, was nearly restored; and with it he could change the position of the other limbs, which were helpless. The wound, being about two and a half inches by one inch, had the usual appearance of a gunshot flesh wound, with exuberant granulations, and the skull was not exposed to view. The numbness and unpleasant sensation of the affected limbs still remained to a considerable degree.

Present Condition, Three Weeks after Admission.—The wound is healing slowly, showing disposition to exuberant granulations, and several small fragments of bone have been extracted, as previously stated. Both arms have fully recovered their powers, and the patient is able to walk about the wards and in the vicinity of the hospital buildings, with the assistance of a cane. He does not use crutches. The deadness and formication of the affected limbs have almost disappeared, but the cephalalgia and pain in the shoulder still remain to a slight degree. The improvement has been more manifest and rapid in the left leg than in the right. There has at no time been any facial paralysis, and the heart's action since admission has been regular, averaging 96 beats per minute. The patient can give no account of this organ, the derangement, if any, not having been sufficient to attract his attention. The bowels are quite regular, there having been an evacuation every two days since admission, no cathartics or laxatives having been administered.

Another patient was received at the same time with a similar wound, but with none of the symptoms attendant upon this case.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, January 27, 1864.

DR. A. JACOBI, PRESIDENT, IN THE CHAIR.

FRACTURE OF THE PELVIS.

DR. CONANT related a case of fracture of the pelvis, occasioned by the patient being caught between the edge of a platform and a moving train, and carried in that position for a distance of six feet. The body and descending ramus of the pubes and ramus of the ischium were fractured on one side, and also on the other side the body of the pubes and ramus of the ischium. Besides this, there was another fracture extending longitudinally through the whole length of the sacrum. The bladder and perineum were perforated. The patient lived forty-two days. On the seventh day a sudden gush of blood took place from the opening into the perineum, but the hemorrhage was arrested by the injection of cold water. The patient subsequently had two or three other attacks of hemorrhage.

On making the post-mortem, an abscess was found in the iliac fossa of one side, extending as high up as the kidney. Dr. Conant saw the case during his term of pupillage with Dr. Peaslee, in whose practice it occurred.

FATTY DEGENERATION OF THE PLACENTA.

DR. LEWIS SMITH presented a specimen of fatty placenta with umbilical cord attached, and gave the following history of the case: The patient is thirty years of age, and is the mother of three healthy children. In her last (fourth) pregnancy she advanced favorably up to the seventh month, when one day, without assignable cause, she became giddy, and narrowly escaped falling. From that time the foetal movements ceased. During the subsequent two or three weeks she experienced these attacks of giddiness quite frequently.

There was nothing unusual in the labor, the foot presenting. On examining the placenta, it was found to have undergone fatty degeneration; and the cord, at the point where it entered the abdomen of the foetus, was practically obliterated. Two of the vessels were found to be closed, while one, which appeared to be the umbilical vein, was only pervious to the extent of admitting a small crow-quill. The child presented a very livid appearance; and, external to the dura mater, and also internal to the scalp, was a large effusion of blood, about an ounce in quantity. Dr. Smith thought that partial obliteration of the cord took place first, then fatty degeneration of the placenta resulted; at the same time the circulation of the foetus was so far impeded as to give rise to extravasation.

ABSCESS OF PARIETES OF CHEST, COMMUNICATING WITH THE PLEURAL CAVITY.

The second specimen presented by Dr. Smith was a portion of lung taken from a child who died at the age of nine months. It was a nursing infant, and prior to the sickness of which it died, it seemed to be in a good condition. It was fleshy, although it belonged to a scrofulous family, the other children having all suffered from some strumous trouble. Dr. Smith was called to the case on the nineteenth of December, and at that time he was not able to make a diagnosis from any existing symptoms. There was only a little excitability of the pulse, with some feverish restlessness. On the twenty-second of December the mother called his attention to a prominence just below the right clavicle, which proved to be an abscess. On the twenty-fourth of December the prominence subsided, and with its subsidence the symptoms of irritation which had previously existed became much worse; the pulse rose to 160 per minute, and the respiration increased to 60 or 80, and there was that disturbance in the rhythm of the breathing which is indicative of serious inflammatory disease within the chest. Within a day or two after the disappearance of the tumor, there was marked dullness on the right side, and this increased until there was no resonance on percussion at all on that side. The right pleural cavity had evidently filled with a liquid, of some sort, and from this time until the thirty-first of December there was no material change in the symptoms, except that the little patient grew more and more feeble until death occurred.

At the autopsy, on dissecting away the flap from the ribs on the right side, an abscess was opened into, which contained about an ounce of pus. There was an opening from this abscess into the right pleural cavity, so that by pressing upon ribs pus exuded. On removing the sternum, the liquid was found to consist mainly of serum, and at the bottom of the cavity was a pretty large quantity of pus, probably an ounce. This was the second case of the sort which Dr. Smith had seen. In the first case the child was seven months old, and presented substantially the same symptoms in the shape of a tumor externally, together with lung symptoms.

DR. JACOBI, after remarking upon the rarity of the affection, referred to a case which occurred in his practice. The tumor was situated in the fourth intercostal space, and, on its disappearance, decided symptoms of pleurisy manifested themselves. The infant lived only twenty hours after the perforation of the costal pleura.

The Society then adjourned.

Progress of Medical Science.

ON THE HYPODERMIC TREATMENT OF UTERINE PAIN.

By J. HENRY BENNETT, M.D., late Physician-Accoucheur to the Royal Free Hospital.

I AM not aware to what extent the hypodermic injection of sedatives has been resorted to for the treatment of uterine pain since it was first introduced to the profession, but I am desirous of giving my testimony to its extraordinary efficacy in cases presenting that symptom. I may add, that my attention was first forcibly directed to this mode of treatment by the valuable papers of Mr. Charles Hunter in *The Lancet*.

During the present winter I have used with prompt and marked success, the hypodermic injection in several cases of severe dysmenorrhœa, with or without hysterical complications, and in several others of uterine and ovarian neuralgia, and of facial neuralgia having a uterine origin. The relief has been obtained in from fifteen to thirty minutes, without being attended or followed by the headache, loss of appetite, or nausea, which are so frequently the result of the use of opiates in any other way, even by injection into the rectum. This latter mode of administering opiates has hitherto been my sheet-anchor in the treatment of uterine spasms and pain, and is certainly most efficacious; but it is not unfrequently attended by all the above-mentioned drawbacks, from which the hypodermic injection appears to be singularly free. In nearly all the instances in which I have tried this mode of introducing opiates into the system, the sedative result alone has been produced; there has been no subsequent bad effect whatever.

In one case of severe uterine tormina and pain, the result of arrested menstruation from cold, I injected thirty minims of the solution of morphia. In half an hour the pains, which had been agonizing for the previous twenty-four hours, were calmed. A good night's rest followed; and the next morning the menses had resumed their course, and my patient was all but well. In another similar case, the uterine pain was accompanied by severe hysterical symptoms. The injection was followed by the same favorable result—ease, sleep, and rapid disappearance of all morbid symptoms.

Owing to the complete control over the element of pain which the hypodermic injection of opiates appears to give, I have been able to carry on the necessary treatment, in an interesting case of uterine disease, which I should otherwise have been obliged to treat under chloroform, or at a great disadvantage. The patient, a young German lady of twenty-four, came to Mentone last autumn, by direction of her medical attendants, with the view of spending the winter in the South. She was considered to be suffering from neuralgia, facial and general, and from nervous irritability of the system in general. She had been travelling with her husband from place to place, from bath to bath, in search of health, for more than two years. On being consulted, I recognised the existence of a host of uterine symptoms, and found that the neuralgic and nervous illness had manifested itself after a severe confinement, which had occurred about three years ago. The discovery of extensive inflammatory ulceration of the neck of the womb gave the key to the state of ill health. Singularly enough, none of her previous medical attendants had suspected the uterine origin of the neuralgia. Such cases are always very difficult to treat—interference with the uterine lesion all but invariably rousing the neuralgia. I have repeatedly had cases of the kind that I could only examine and treat locally by giving chloroform to the full surgical extent on each occasion, and this I have had to do twenty or more times in the same patient.

With the patient in question the surgical treatment of the ulceration was borne tolerably well at first, but as the diseased surface became more healthy, and consequently

more sensitive, endurance diminished. Every time the sore was touched, severe neuralgia followed, and the general health began to flag. In former days I should have suspended all treatment, and have sent the patient to the country for a couple of months to allow the nervous system to calm down, and to let Nature do her best. In this instance such a course was not desirable, my patient being very anxious to continue the necessary treatment so as to be locally cured before we separated in the spring. I thought, therefore, of the hypodermic treatment, and tried the injection of thirty minims of the solution of morphia immediately after each uterine dressing. This course was attended with complete success; no neuralgia ensued, and I have been able to continue uninterruptedly the treatment now all but brought to a successful issue. On one occasion I omitted the precaution, and was sent for at ten o'clock at night. I found the patient a prey to a most distressing attack of facial neuralgia, which had come on an hour before. She was positively convulsed and shrieking with agony. Chlorodyne, sulphuric ether, etc., had been taken, with no relief. I injected the thirty minims of morphia solution, and in twenty minutes she was calm and free from pain. It was repeated next day, and the facial neuralgia has not returned. This lady will no doubt gradually recover her health and get rid of the neuralgia when the uterine disease is thoroughly cured.

In a case of pure neuralgia, attacking first one and then another part of the body, I have injected from twenty to thirty minims of the acetate of morphia solution forty-two days in succession, without any unfavorable result. The neuralgia, which was very severe, was entirely subdued by it for about eighteen or twenty hours, when it reappeared, gradually increasing in intensity until the injection again relieved it. At the end of that long period the pains gave way, the treatment having been either curative, or having allowed the neuralgic attack to wear itself out. During the entire period of treatment, the patient, a very delicate lady, slept better than usual, ate as well (her appetite being usually bad, and the digestive powers weak), and was able to take part socially in all that was going on around her. No one, indeed, was aware, except her family, that she was suffering from so painful a malady. To my surprise, I was able to suspend the morphia suddenly, without any of the distress and discomfort which is habitually observed when opiates have been long used and are abruptly abandoned.

From what I have seen of the hypodermic system, I believe that its use is capable of great extension in the treatment of pain generally. I consider that the injection of a solution of morphia after any operation would deaden pain, and produce a general calm of the system, both soothing and beneficial to the patient. I think also that this result might be obtained in most cases without the usual drawbacks of opiates taken internally.

Some years ago I recommended in this journal the injection of opium into the rectum as a means of modifying and even arresting obstinate sea-sickness. Since then various additional cases have come under my notice illustrating its efficacy. The great obstacle to all edification in sea-sickness is the fact that the stomach absorbs fluids with difficulty. By injecting subcutaneously this difficulty is got over. Moreover, a subcutaneous injection would be managed easier on ship-board than the rectal injection, to which most people have a very natural antipathy.

I have used all but exclusively a solution of acetate of morphia in distilled water. Nine grains dissolved in two ounces of water gives a strength about equivalent to that of laudanum. The liquor morphiæ of the Pharmacopœia contains spirit, and I have found that it constantly occasions small patches of painful inflammation; without the spirit, on the contrary, it appears to be quite innocuous. A moderate-sized steel needle or canula I find preferable to the small gold one. The steel canula is sharper, and passes more easily through the skin. By pinching firmly the fold of skin that has to be pierced between the finger and thumb,

its sensibility to the puncture is much diminished. It does not seem to matter much, as regards results, in which region of the body the injection takes place. I have principally chosen the præcordial region for uterine and general pain, and for local neuralgia a spot as near to the region affected as possible.—*Lancet*.

American Medical Times.

SATURDAY, JULY 30, 1864.

UNION OF CIVIL AND MILITARY SURGEONS.

PREVIOUS to the present war the medical profession in this country was divided into the civil and military, and these two branches were unfortunately widely separated. This estrangement was due to circumstances, and not to prejudice or partisan feeling. The graduate who entered the army was of necessity immediately withdrawn from the circle of social as well as professional life, and assigned to duty at some remote frontier station far beyond the bounds of civilization. Here he was retained often for years, completely shut out from all intercourse with his brethren, and became lost to the profession in civil life.

Whoever has mingled familiarly with both branches of our profession must have noticed certain marked differences between them. We will allude to the two most patent. And, first, the great advantages for improvement in the practical duties of his profession, which the civil surgeon enjoys in contrast with the military, necessarily gives the former a more extensive and profound knowledge of his art. The civil surgeon is constantly stimulated to study and investigation, and is called upon hourly to apply his knowledge practically. He could not if he would, shirk the daily lessons which are pressed upon his attention. He lives in an atmosphere charged with the vitalizing influences of professional success, and if he fails, his failure is due to his own incapacity or indolence. But the surgeon who enters the army resigns, at the very threshold of his career, every hope, and, in truth, every aspiration of future eminence in the knowledge of the science and art of medicine. He is at once removed far from all the facilities for scientific investigation, and his sphere of observation is narrowed to the smallest possible circle. He forsakes every incentive to study and every association for improvement, and consigns himself to the dull routine life of a pioneer. He is not allowed vacations for travel, observation, and study, but throughout his whole professional life remains isolated and steadily confined to his duties. It is not surprising that, though the Army Examining Board has always selected the best qualified graduates, the scientific and practical character of the Medical Staff falls considerably below that of the profession in civil life.

If now we compare the moral tone of the two branches of the profession, we find the contrast equally great, but quite reversed. The average of civil practitioners have not that high and unwavering sense of the dignity of their calling which should characterize members of a liberal profession. "Medicine," says Hippocrates, "is of all arts the most noble, but through the ignorance of those who practise it, it is far behind all the other arts." It is not entirely through the ignorance of those who practise it that, in our

day, medicine occupies an inferior position; but much is due to the want of a higher moral tone in the profession, and a more correct appreciation of the dignity and sacredness of the physician's duties. Too many practise their art as a mere trade, and comparatively few are found willing under all circumstances to defend it against the machinations of charlatanry. Social intercourse and the power of gain seem gradually to detract from its honorable character, and we find it too often prostituted to unworthy purposes.

But when we turn to the medical staff of the regular army, as formerly constituted, the change is as marked as it would be if we entered the ranks of another profession. The whole body is pervaded by a common sentiment of professional respect and even veneration for their calling. Under the rigid discipline of the former chiefs, who, whatever their faults, had a nice sense of honor, and compelled all who came within their jurisdiction to appreciate it, there was infused into the whole staff, in a remarkable degree, a personal dignity and a regard for official and professional character. SATERLEE, WOOD, TRIPLER, CUYLER, McDUGALL, SIMMONS, all the representatives of the staff, make those who approach them feel that they are in the presence of men who hold in proper esteem their official position and profession. Indeed, we believe that in the ranks of the old staff of the regular army were to be found the best representatives of the moral excellence of our art. The whole staff was penetrated with a regard for its honor and dignity so profound and all-pervading that no moral delinquencies could be tolerated. Members were thus placed under an obligation to sustain the high character of the staff, which acted as a most powerful restraint upon their actions. The result of this discipline was the gradual elevation of the character of the staff, until it occupied a most enviable position in the army. The medical officer was everywhere regarded as the soul of honor, and as a model of official integrity. He was marked as a gentleman of education and refinement, and the most implicit confidence was reposed in him. There was that *esprit de corps* which made the staff a unit in the preservation of its dignity. Whoever seriously offended lost rank and position even in his own estimation, and sooner or later concealed his shame in retirement from the army.

The war has brought about a remarkable commingling of the two sections of the medical profession. The civil practitioner has entered the army, and the army surgeon has returned from the frontier post. The two branches of a common stock have again become united, and it is a matter of no small interest to inquire how they are to react upon each other. That the members of the regular staff will now rapidly advance in professional studies there can be no doubt; there is good evidence that they will become rivals of the civil surgeons in a knowledge of the science as well as art of surgery. Will the civil surgeon become animated by that high sense of honor, and be penetrated with that regard for the dignity of his profession, which characterized the old staff—and will that staff lose by the association somewhat of its dignity and official integrity? We do not doubt, from personal observation, that the first result is being gradually, but most effectually accomplished. The civil surgeon, who returns from military service, has almost invariably had his moral and professional status elevated. He has a far better opinion of his profession when he returns than when he entered the army. He has been placed where his professional

character has been recognised, and where he had power to command proper respect. We anticipate, therefore, the return to civil life of a large body of practitioners who have been thorough disciplined in the school of professional respectability, and who will raise the status of our profession in society. But is there not reason to fear that by this contact virtue has gone out of the old staff of the regular army? Is it still pervaded by the same sentiment of loyalty to its own standard of honor and integrity? Is it not gradually becoming more lax in its moral tone, less dignified in its bearing, and more conformed to the habits and manners of its associates? These are most important reflections, which we commend to the serious consideration of the individual members of the staff. While we rejoice to notice the favorable impression which the regular is making upon the volunteer staff, we should deeply regret to find at the close of the war that the former had lowered its standard of professional morality.

THE SANITARY COMMISSION.

THE *Sanitary Commission Bulletin* extracts from the *Revue des Deux Mondes* the following pertinent reflections upon the Sanitary Commission:—"One sees that the Sanitary Commission is a peculiarly American institution. There is no doubt the chiefs of the various European armies would not tolerate at any price the formation of a free society of hospitaliers, charging itself with the duty not only of taking care of the sick and wounded but of making army censuses, obtaining transportation for the soldiers, pursuing deserters,* examining the cause of punishments inflicted, and defending the interests of the troops not only against speculators, but even in ease of need against the Government itself. In England, not less than on the Continent, any association of individuals putting forward any such pretensions would certainly be accused of madness or wickedness. So true it is, that American manners owe their peculiarities rather to the long enjoyment of free institutions than to the Anglo-Saxon origin of the people. After that terrible Crimean winter, during which the English troops lost one-half of their effective force, the British Government decided, it is true, to appoint a Sanitary Commission, in order to save the remains of its army, which threatened to melt away entirely; but that Commission had to confine itself to the reorganization of the medical department and the recommendation of hygienic precautions. The European work which most resembles that of the American patriots, is that of the International Association of Nurses established at Geneva by M. Henri Dunant. Under certain aspects, the enterprise set on foot by this noble-hearted man is, perhaps, greater and more humane than that of the American Sanitary Commission, for it rises above the narrow considerations of local patriotism, and hoists the flag of universal charity over all armies engaged in mutual slaughter; but does not this International Association of Relief, by the very extent of the plan which it traces out for itself, condemn itself to be misunderstood? It has had official encouragements, approvals more or less vague, from various crowned heads in abundance, but unfortunately it has not yet received the all-powerful support of popular enthusiasm."

* This is of course an error of the writer; the Commission charges itself with no such duty.—[Eds.]

TRANSPORTATION OF COMPOUND FRACTURES.

A MEDICAL member of the Sanitary Commission writes from Washington (*Sanitary Commission Bulletin*) as follows in regard to compound fractures:—"The fourth point—means of support for fractured limbs: 30 sheets of perforated zinc (7 feet by 10½ inches), with shears for cutting and fitting the metal, have been sent to the sanitary depot in front for splints; 3 bbls. of statuary plaster, coarse cotton cloth, etc., 1 ton of oakum; and to-day a quantity of fracture litters, sent, after consultation, to Dr. — and other active men in the Medical Staff. The importance of this subject is impressive and clear when studied in connexion with recent battle reports of the Medical Bureau. In 20,930 wounds, 749 were compound fractures of femur; and of this number 480 were transported unamputated. Again, of the knee there are 242 wounds, and of these 138 were transported unamputated. Of the leg, there were 948 gunshot fractures, of which 650 remained unamputated. There were at the same time 566 gunshot wounds in the lungs and thorax. The 1st Division, 6th Corps, in the Wilderness (Fredericksburg observations), had 34 compound fractures of the thigh living, 20 amputations, and 14 transported unamputated. It has been found that any one of these transported fractures must be moved, off and on (unless the bunk or bed goes with the sufferer), at least 14 times before resting in a general hospital. Often the number of movements is much more! Very few of the wounded thighs and knees now and recently brought to Washington have any supporting appliances.

Reviews.

THE DISEASES OF THE EAR: their Diagnosis and Treatment. A Text-Book of Aural Surgery, in the form of Academical Lectures. By Dr. Anton Von Tröltsch, Aural Surgeon and Lecturer in the University of Würzburg, Bavaria. Translated from the German and Edited by D. B. St. John Roosa, M.D., Assist.-Surg. to the New York Eye Infirmary. Illustrated with Wood Engravings. From the second and last German edition. New York: William Wood & Co. 1864. pp. 254.

No branch of practical surgery has been so universally neglected in this country as that pertaining to the ear. This would naturally excite much surprise if we simply regarded the importance of the affections of this organ. The threatened loss of hearing, or even its impairment, always excites the greatest anxiety on the part of the patient and friends, and the largest sacrifices are cheerfully made to avert the impending calamity. When, however, we take into consideration the obscurity which has hitherto overhung the pathology of the auditory apparatus, we cease to wonder that many an enthusiastic young surgeon who has sought early reputation in aural surgery, has soon wearied of his choice of specialties, and finally abandoned it for some better understood and more lucrative branch. We rejoice that ardent and scientific explorers have finally entered this field, and nothing daunted by the obstacles which they have met on every hand, have succeeded, after years of labor, in establishing aural pathology on a firm basis. While the profession of Germany, France, and Great Britain have had rival laborers in this department of study, we have in this country scarcely risen to an appreciation of the labors of our foreign brethren. We have reproduced the works of Kramer, Itard, Toynbee, and Wilde, but they have not created that interest in aural surgery which the subject demands. We welcome, therefore, any

effort to extend a knowledge of this branch of surgery in the profession of the United States, and we hope the day is not distant when we shall begin to contribute our quota to the common stock of knowledge on the diseases of the auditory apparatus.

The work before us is another contribution from Germany to the literature of aural surgery. The author, Von Trötsch, has already attained such a position by his studies of the anatomy of the ear, and his illustrations of its diseases, that we are prepared to receive his work as embodying the latest views of the most scientific German writers on this special subject. The translator, Dr. Roosa, after ample opportunities for preliminary studies in this country, has extended his knowledge of aural surgery by a residence in Germany, where he had the familiar acquaintance of the leading aurist of that country. He has therefore enjoyed unusual advantages for qualifying himself for the task of reproducing a work of German origin.

The first lecture is introductory, and contains the author's views of the importance of a knowledge of the diseases of the ear. In the second lecture the examination of the auditory canal and membrana tympani is described. The method of illuminating and examining the external auditory canal and membrana tympani by a concave mirror is a great improvement upon the former means employed. To the author is undoubtedly due the first publicity of this method, though there are allegations that others had resorted to the same means. However that may be, no one who has tested the various apparatus formerly used, or compared them with this simple instrument, can doubt of the service which it has been to aural surgery by its general introduction to practice.

In lecture third the author remarks upon the secretion of cerumen, and the method of treating its accumulation. Every careful observer must have noticed that most of the cases of obstruction from ear-wax occur without any special local irritation. The errors of diagnosis of the causes of deafness, when dependent simply upon an accumulation of cerumen, have been the most glaring in surgery, and we are glad to notice that the practitioner is warned of the danger of mistakes.

Foreign bodies in the ear and the means of removing them are considered in lecture fourth. We wish this remark, "Generally, the presence of these bodies in the ear is less injurious than the attempts to remove them," could be impressed upon the mind of every practitioner. The violent measures adopted often do great injury to the external ear without accomplishing any good. The careful injection of tepid water generally answers every purpose in the removal of foreign bodies.

The three following lectures are devoted to inflammations of the external auditory canal, but there is nothing new elicited. Lecture eighth is a meagre discussion of the diseases and injuries of the membrana tympani. This most important class of affections is despatched in eight pages. The author believes that myringitis is not often an uncomplicated disease, but is more frequently the result of the extension of inflammation from the canal. We are pleased to note that Dr. Roosa advocates the use of mercurials in chronic myringitis. There is but a passing allusion to injuries of the membrane.

In the two following lectures we have a very full account of the catheterism of the eustachian tube and middle ear. The author is an enthusiastic advocate of the catheter. The value which he attaches to this method of treatment, we may learn from the statement that he has introduced the catheter 25,000 times. He will not be sustained in the frequent employment of the instrument either in Great Britain or this country. The special form of medication of the internal ear advocated by the author is by means of gases. In this we think he will be approved by every judicious aurist who has attempted the use of fluids. An apparatus for the application of the vapors is figured.

In the nine following lectures we have a very satisfactory review of the diseases of the internal ear. Commenc-

ing with simple acute catarrh, the author proceeds to notice the various affections of the cavity of the tympanum, with the methods of treatment. In lecture eighteen we have an interesting and very instructive account of purulent catarrh in children, which every practitioner can read with profit. The frequency of this disease, as appears from Dr. Trötsch's investigations, is truly surprising. In forty-six dissections of the auditory apparatus of twenty-four children, he found the middle ear normal in but thirteen cases; the remainder were affected with purulent catarrh. The author expresses a doubt as to the morbid character of the appearance observed. The clinical history of this affection is written out, but not very fully, and the treatment directed. The dangerous consequences of otorrhoea are noticed in lecture twenty-first, and Dr. Roosa has added striking illustrative examples, the most remarkable of which is Dr. Agnew's case of necrosis and removal of the labyrinth.

Nervous deafness is the subject of lecture twenty-second. The author thus states his belief in this class of diseases:—"Let us confess that we only name those affections 'nervous' which we do not comprehend, and which, as a rule, we cannot improve." The more thorough study of aural pathology has tended to change materially the views of modern writers on nervous deafness. In so many instances have actual lesions been found to explain the symptoms, that the catalogue of cases of purely functional derangement has been largely reduced. The discussion of this subject by Dr. Trötsch is not very full, though most of the points of interest are briefly reviewed.

The remaining three lectures are devoted to otalgia, deaf-mutism, hearing contrivances, methods of examining the amount of hearing, and tinnitus aurium. We have not space to make further allusion to them, but shall conclude with a general remark upon the merits of author and translator.

The author states that he designed to lay before the profession a text-book which should comprise the whole field of aural surgery, and be the result of his personal observations and investigations. It was his desire to avoid "historical considerations" and "any critical estimate of what has been already accomplished." For this purpose he has chosen to publish lectures, "an outward form, suited to secure this end." Though he has secured a "certain brevity" by adopting the form and style of lectures, we are not satisfied that the author has thereby enhanced the value of his book. On the contrary, we are constantly and annoyingly impressed with the want of thoroughness in the discussion of nearly every subject which he treats. In a text-book on any well established branch of practice, as general surgery, practical medicine, obstetrics, or ophthalmology, we can dispense with details, but in a branch like aural surgery, so little understood by the profession at large, there cannot be too much completeness given to the discussion of every subject under consideration. Perhaps, however, we are anticipating too much from an author who simply intends to embody in his book only the result of his personal observations and investigations. We certainly ought not to expect such a work to be a text-book in the ordinary sense of that term.

This work cannot be considered as in any sense a substitute for the excellent treatises of Wilde, Toynbee, and Kramer, now accessible to the American practitioner. In every respect it lacks the completeness of these volumes; and that fulness of detail is too desirable in a work on a branch so obscure as aural surgery, to be overlooked. As a brochure, however, containing the results of the author's personal observations and investigations, it will be consulted with interest and profit, and in that respect is a welcome addition to the literature of aural surgery.

Dr. Roosa has not performed his part in an unexceptionable manner. He seems to have labored in an unusual manner under the difficulty which every translator of German into English has to contend with—and that is, the rendering of peculiar idioms and the reconstruction of ob-

scure sentences. As a consequence, we constantly meet with singular expressions and awkwardly constructed sentences, often involved in much obscurity. We will give one or two of the many examples which we have marked. On page 18 we have a fact recalled to our consciousness, "right lustily;" on page 23, "before all things, we must labor in three directions, before that anything," etc.; on page 46, "there are some severe incidents of these circumstances," etc.; on page 47, "Hyrtl well remarks that such remedies are too great burlesques for the serious mechanism of the surgeon." A few errors of this kind might well be overlooked; but when they occur upon nearly every page they greatly inconvenience the reader, and must be regarded as serious defects in the work. Aside from the above criticism, we believe that Dr. Roosa deserves much credit for this effort to enlarge our knowledge of the specialty to which he is devoting his studies. Such labors will in due time bring their reward.

THE PATHOLOGY AND TREATMENT OF VENEREAL DISEASES; INCLUDING THE RESULTS OF RECENT INVESTIGATIONS UPON THE SUBJECT. By FREEMAN J. BUMSTEAD, M.D., Lecturer on Venereal Diseases at the College of Physicians and Surgeons, New York; late Surgeon to St. Luke's Hospital; Surgeon to the New York Eye and Ear Infirmary. A new and revised Edition, with Illustrations. Philadelphia: Blanchard and Lea. 1864. pp. 640.

WE need no better evidence of the favorable reception and high appreciation of the first edition of Dr. Bumstead's work than the early appearance of the volume before us, especially at a time when medical literature is receiving (in this country at least) so little encouragement as at present. It is about three years since the first edition was published, in which the author appeared as a bold advocate of the distinct nature of chancroid and syphilis, or what was then called the soft and hard chancre; the former a simply local affection, never infecting the system, and never requiring treatment by mercury and iodine; the latter a constitutional affection, always requiring constitutional treatment. Though some of the older surgeons shook their heads, and continued to cling tenaciously to the doctrines in which they were early taught, a majority of the profession not too old to learn—the young and studious—always open to conviction and eager for investigation, received the work kindly, thoroughly testing the doctrines it taught, and were not slow in appreciating its merits. Already is Dr. Bumstead enjoying the rich reward of seeing his work occupy a high position in medical literature, and received and regarded as authority both in this country and in Europe. As an elaborate review of the first edition has already appeared in this journal, our purpose at this time will be to only notice some of the improvements contained in the present one; and to this end we can do no better than to quote from the preface:—"The most noticeable change in the present edition will be found in the division of the work. From a certain deference to the opinions at that time generally received, the chancroid and its complications were, in the first edition, discussed in connexion with syphilis. They have now been assigned, as is their due, to separate portions of the work. This change has necessitated a complete reconstruction of the second part of the first edition, and its division into two—a change which, it is hoped, will impress still more strongly upon the mind of the student the distinct nature of the two diseases referred to. The same object has been had in view in abandoning the terms 'soft,' 'hard,' 'simple,' and 'infecting chancre,' and in applying, in accordance with logical accuracy, the term *chancre* exclusively to the initial lesion of syphilis, and that of *chancroid* to the contagious ulcer of the genitals. The practical portion of the work has also undergone important alterations on various topics, among which may be mentioned the treatment of stricture by the immediate plan of Mr. Holt; the abandonment of specific remedies in most cases of the initial lesion of

syphilis; the preference given to the external rather than the internal use of mercury in secondary and tertiary syphilis; and the necessity of trusting to nature, aided by hygienic influences, and not to treatment indefinitely prolonged after the disappearance of all syphilitic manifestations, to eliminate the virus from the system." The author seems determined to keep fully up to the times, and we sincerely congratulate him upon his success. The book is finely illustrated, and bids fair to run through many editions.

A MANUAL OF THE PRACTICE OF MEDICINE. By THOMAS HAWKES TANNER, M.D., F.L.S. From the last London edition, enlarged and improved. Philadelphia: Lindsay & Blakiston, 1864. Pp. 699.

THIS manual has enjoyed a large popularity both in this country and in England. It is written in a plain, familiar style, each subject being discussed only in its practical aspects. The range of subjects is very great, embracing not only practical medicine but the diseases of the eye, skin, etc. To students it affords a very complete and suitable manual for study, and to the practitioner a convenient work for reference.

Correspondence.

PHILADELPHIA.

Special Correspondence.

THE vacancy created in the University by the resignation of Prof. W. Pepper, has been filled by the election of Dr. Alfred Stillé to the chair of Practice of Medicine; that in the Jefferson has also been filled by the election of Dr. B. Howard Rand to the chair of Chemistry. Of the latter I gave you the antecedents in a recent epistle; of the former, I may say that the profession are well pleased with the choice. Prof. Stillé filled a chair in the early faculty of the Pennsylvania College, after its first *émeute*, when the McClellan party retired, to be succeeded by a faculty, who in turn retired, and were succeeded by the transfer *en masse* of the faculty of the Philadelphia Medical College. Both these colleges have disappeared, the latter building being now used as a coach repository, the former by a party of "Eclectics" who run the "doctor-making machine," and annually convert a limited number of "country boys," etc., into full-fledged "doctors," by virtue of the laws of this great commonwealth "entitling them to all the privileges," etc.

Prof. Alfred Stillé is a courteous and learned gentleman, not largely engaged in practice, but deeply immersed in study, and will give a course of lectures replete with learning. He is known by the valuable contributions he has recently made to the literature of the profession; and the name of Stillé is rendered additionally interesting by the memory of Dr. Moreton Stillé, who died in the prime of life and full of medical honors, and the equally valuable association of Dr. A. Owen Stillé (cousins of the Professor), who died at Fort Monroe of typhoid fever contracted while with his regiment in the field. The latter was the first surgeon accepted and mustered in after the fall of Sumter, and nobly performed his duty—even on one occasion, in the absence of the officers, leading his regiment against the enemy.

The fifteenth annual session of our State Medical Society was as well attended as usual, and, as usual, a large number of valuable papers were hurriedly read in abstract and referred to the Publishing Committee, and the delegates adjourned as speedily as possible, although on this occasion no one had the temerity to speak, or even think, of the Union or anything thereunto attached, if we except one U.S.G. Hospital to which they were invited. The great Fair had claims paramount to anything else. As

they adjourned to meet at Altoona next year, perhaps if any one goes, some real work may be done.

As far as I can judge, the action of the American Medical Association in electing Dr. Atkinson to the office of Permanent Secretary gives great satisfaction, and anticipations are indulged that the creation of such an office will be of great benefit to the Association.

The health of our city is as usual, a little of almost everything prevailing, but nothing of any account, and the mortality is quite low. The intense heat of the past few days contributed slightly to an increase, but as it has now moderated, no fears are entertained of any unusual prevalence of disease.

Our army hospitals are quite full, and several new ones of great capacity are being opened in the vicinity. It would appear that surgeons are none too plentiful, and our worthy Medical Director is still prepared to increase the force; but when we review the work expected of contract surgeons, the responsibilities imposed upon them, and the miserable pittance allowed them, we cannot be surprised at the want of eagerness displayed by men of any amount of practice to accept of such a position.

The success in these hospitals is beyond all expectation, as the death rate is very small, the percentage of rapid recoveries large, and the instances of the setting in of gangrene, etc., are rare. Any one of our military hospitals can be examined at any time and found clean, and in every way worthy of commendation. Not only is the disease or injury of the patient carefully attended to, but, thanks to the ladies and a host of good Samaritans, every other means is employed to improve them, both bodily and mentally. Plenty of reading of every description is always at their service; materials for correspondence with the loved ones at home or their comrades yet with the regiment; and when necessary, a fair amanuensis is at hand to supply any deficiencies that may exist. In fact, the surgeons are greatly aided in refitting the men for their speedy return to duty by these minor adjuncts, many of which money alone could not furnish, but which can only be obtained by the continual daily sacrifice on the part of "gentle woman."

Our Fair in aid of the Sanitary Commission seems, as far as can at present be judged, to have been a decided success, and for much of this we are also indebted to the ladies. Bless them, how they beautify and make successful all they touch, provided only that they approach the work in a proper spirit. It is wonderful how they have cut our purse strings and bled us at every pore in behalf of the sick and wounded soldiers. I observed a fine display of drugs, and at one table a handsome case of surgical and dental instruments, but was informed the latter had no proper attendant, and that the sales had almost amounted to nothing. Unfortunately, there was in the locality of this case too few persons to attend to the buyers, and too many articles of a more general interest to allow of much attention to this truly fine array of our *armamentarium*.

Many articles will be left to be sold in a store to be used for the purpose, as no auction sale is to be allowed.

The action of the American Medical Association at its late session in your city relative to Morton, of ether notoriety, meets with an almost if not quite unanimous approval in Philadelphia. His conduct here did not increase the number of his friends nor add greatly to his store, and it is earnestly hoped the resolutions forwarded to Congress will have the desired effect.

PHILADELPHIA, June 23, 1864.

Dr. Gutzeit of Riga recommends the following ointment as the sole treatment of simple carbuncle—viz. half a drachm of opium mixed up with two ounces of white ointment, spread as thick as the back of a knife on lincn rag, and applied to the tumor and its circumference three or four times daily. He says that he has derived great benefit from the employment of this means in numerous cases.

Obituary.

JOSEPH H. VEDDER, M.D.

DR. JOSEPH H. VEDDER, M.D., was a native of Schenectady, N. Y., and graduated in Union College in the year 1851. From early life he had a strong predilection to the science of medicine, and commenced the study of it immediately after graduation with his brother, DR. A. M. VEDDER, of that city. He afterwards entered the College of Physicians and Surgeons in the city of New York, and completed his studies in that institution. At the time of his death he was Secretary of the Alumni Association of that College. For two years he availed himself of every opportunity to accomplish himself in his profession in the public hospitals in and near New York. In the fall of 1854 he established himself in Flushing, Long Island, where an extensive and lucrative practice at once opened to him. By his professional skill and success and his exemplary character, he won the confidence and respect of the community to a degree which is seldom attained by a young man starting in a professional life.

In the department of surgery he evinced a marked enthusiasm. He introduced a novel improvement in the construction of splints for fractures, and an apparatus for making extension in hip-joint diseases.

After eight years of incessant labor in his profession, symptoms of pulmonary disease led him to visit Minnesota and Cuba to improve his health. He returned to Flushing and again practised for a season. But it was soon apparent to himself that the fatal hand of disease was upon him. He closed his business in Flushing and returned to his native city to die among his kindred. His social nature was genial, frank, and unselfish. Warm in his attachments, confiding in his friendships, pure in his associations, he was endeared to a large circle of friends, who respected him for his talent and loved him for his worth. To the attractions of a cultivated mind and amiable disposition were added the graces of an humble Christian character, which manifested itself in his conscientious devotion to duty and cheerful hope in sufferings. His religious principles were deep and thorough. He made a public profession of them in connexion with the Reformed Dutch Church in Flushing in the year 1860.

Few young men had more to render life attractive. Few had brighter promises. For us there is a peculiar sadness in the early death of one so fitted for a useful and a successful life. But Dr. Vedder met the sacrifice with a cheerful spirit, and, through the months of weakness and declension, calmly rested in a clear Christian faith in the Saviour.

Army and Navy.

CIRCULAR NO. 46.

WAR DEPARTMENT, ADJUTANT-GENERAL'S OFFICE,
WASHINGTON, D.C., June 21, 1864.

To facilitate the arrest of deserters from U. S. General Hospitals and established Military Posts, the Surgeons in charge of Hospitals, and Post Commanders, as soon as a desertion is ascertained, will report the fact direct (with copy of descriptive list, setting forth the full particulars) to the Provost Marshal of the District in which the Hospital or Post is located, and to such other Provost Marshals as may be able to give immediate aid in making the arrest. This in addition to the regular monthly report of deserters sent to the Provost Marshal-General's Bureau, and to this office, from such General Hospitals and established Military Posts.

F. D. TOWNSEND,
Assistant Adjutant-General.

CIRCULAR NO. 53.

WAR DEPARTMENT, ADJUTANT-GENERAL'S OFFICE,
WASHINGTON, D.C., July 19, 1864.

The following classification of Hospital Stewards is announced for the information of all concerned:—

The first class will consist of those appointed in the Regular Army by the Secretary of War, and those of the non-commissioned staff of Regular Battalions and Volunteer Regiments.

The second class will consist of those selected by Surgeons of Hospitals, and detailed by the written order of the Commanding Officer, at a Post (with bodies of troops) of more than four companies.

The third class will consist of those selected by Surgeons, and detailed by the written order of the Commanding Officer, at a Post (or with bodies of troops) of four or a less number of companies.

By order of the Secretary of War :

E. D. TOWNSEND,
Assistant Adjutant-General.

ARMY. ORDERS, CHANGES, &c. PROMOTIONS.

Assistant-Surgeons Isaac D. Knight, E. A. Clark, Thomas B. Hood, George Derby, George B. Parker, H. Z. Gill, John C. Norton, and W. C. Daniels, U.S.V., to be Surgeons of Volunteers.

APPOINTMENTS.

John L. Labarte, M.D., Private 18th U.S.I., to be Assistant-Surgeon 99th Regiment U. S. Colored Troops.

W. S. Millener, M.D., of New York, Surgeon E. Griswold, 2d Pennsylvania Artillery, Acting Assistant-Surgeon W. A. Harvey, U.S.A., Acting Assistant-Surgeon H. G. Keefe, U.S.A., Thomas H. Sherwood, M.D., of Pennsylvania, Thomas G. Henry, M.D., of Kentucky, George A. Otis, M.D., of New York, Surgeon Ebenezer McClintock, of Corps d'Afrique, Surgeon J. B. Cutts, 2d Illinois Cavalry, and Surgeon E. W. Mills, 126th Illinois Infantry, to be Assistant-Surgeons of Volunteers.

Robert T. Wright, U.S.A., W. W. Carothers, U.S.V., and George W. Tuthill, of Washington, D.C., to be Hospital Stewards, U.S.A.

DISCHARGES, DISMISSALS, ETC.

Surgeon R. G. McLean, 155th Ohio Vols. (National Guards), mustered out to date June 1, 1864, the date of muster in, there being no evidence of service rendered.

Hospital Steward B. F. Brown, U.S.A., honorably discharged to accept an appointment as Act. Assistant-Surgeon, U.S.N.

Medical Cadet Mortimer Lampeon, U.S.A., honorably discharged to accept a commission in the U. S. Colored Troops.

Medical Cadet Thomas Landers, U.S.A., honorably discharged to accept an appointment as First Lieutenant.

Hospital Chaplains William C. Hubbard and Mordecai J. W. Ambrose, U.S.A., commissions revoked, not having been confirmed by the Senate.

Assistant-Surgeon H. C. Roberts, U.S.V., honorably discharged on account of physical disability upon the report of a Board of Officers, convened at Annapolis, Md.

LEAVES OF ABSENCE.

Surgeon S. S. Mulford, U.S.V., for twenty days.

Surgeon C. C. Cox, U.S.V., for twenty days.

ORDERS.

Surgeon George Derby, U.S.V., is relieved from duty in the Department of Virginia and North Carolina, and will report to the Commanding General, Army of the Potomac, to relieve Surgeon Cyrus N. Chamberlain, U.S.V.

Surgeon Chamberlain on being relieved will report to the Commanding General, Department of the East, for assignment to duty.

Surgeon H. Z. Gill, U.S.V., is relieved from duty at General Hospital, Camp Dennison, Ohio, and will report to Assistant Surgeon-General R. C. Wood, U.S.A., at Louisville, Ky., for assignment to duty.

Assistant-Surgeon W. S. Millener, U.S.V., will report in person without delay to the Commanding General, Army of the Potomac, to relieve Assistant-Surgeon J. H. Kinsman, U.S.A.

Assistant-Surgeon Kinsman on being relieved will report to the Medical Director, Department of Virginia and North Carolina, for assignment to duty.

Assistant-Surgeon E. Griswold, U.S.V., will report to the Medical Director, Washington, D.C., for assignment to duty.

Assistant-Surgeon W. A. Harvey, U.S.V., will report to the Commanding General, Army of the Potomac, for assignment to duty.

Assistant-Surgeons H. G. Keefe and T. G. Henry, U.S.V., will report to Assistant Surgeon-General R. C. Wood, U.S.A., for assignment to duty.

Assistant-Surgeon George A. Otis, U.S.V., will report to the Surgeon-General U.S.A., at Washington, D.C., for duty in his Office.

Assistant-Surgeon T. H. Sherwood, U.S.V., will report to the Commanding General, Department of the Susquehanna, for assignment to duty.

Assistant-Surgeons E. McClintock and J. B. Cutts, U.S.V., will report to the Medical Director, Department of the Gulf, for assignment to duty.

Assistant-Surgeon E. W. Mills, U.S.V., will report to the Medical Director, Department of Kansas, for assignment to duty.

ASSIGNMENTS.

Surgeon Joshua Owens, U.S.V., as Surgeon-in-Chief, Artillery Brigade, 18th Corps, Army of the Potomac.

Assistant-Surgeon C. E. Goddard, U.S.A., as Surgeon-in-charge, Officers' Hospital, Beaufort, S. C.

Assistant-Surgeon H. E. Brown, U.S.A., as Attending Surgeon, Fort Marcy, N. M.

Assistant-Surgeon John Vansant, U.S.A., as Attending Surgeon, Presidio de San Francisco, Cal.

Assistant-Surgeon W. L. Ramsey, U.S.A., as Executive Officer, General Hospital, Beaufort, S. C.

Assistant-Surgeon S. H. Orton, U.S.A., to New Orleans, La.

Surgeon Burkitt Cloak, U.S.V., as Surgeon-in-charge, Officers' Hospital, Louisville, Ky.

Surgeon C. F. H. Campbell, U.S.V., to examine convalescents at Camp Parole, Annapolis, Md.

Assistant-Surgeon N. M. Glatfelter, U.S.V., to Field Hospital, 9th Corps, Army of the Potomac.

Surgeon H. L. W. Burritt, U.S.V., as Surgeon-in-charge, Holston General Hospital, Knoxville, Tenn.

Assistant-Surgeon E. D. Buckman, U.S.V., to Division No. 2, General Hospital, Beaufort, S. C.

Assistant-Surgeon J. T. Brown, U.S.V., to Hospital at Camp Parole, Annapolis, Md.

Assistant-Surgeon L. S. Comstock, 155th New York Vols., to Camp Parole, Annapolis, Md., until he is sufficiently recovered to rejoin his regiment.

Hospital Steward A. Q. N. Steinbach, U.S.A., to the Office of the Surgeon-General.

Surgeon E. A. Clark, U.S.V., as Surgeon-in-charge, General Hospital, Little Rock, Ark.

Assistant-Surgeon J. W. Applegate, U.S.V., as Surgeon-in-charge, Division No. 2, Beaufort, S. C.

Surgeon C. S. Frink, U.S.V., as Surgeon-in-Chief, 3d Division, 23d Corps, Army of the Ohio.

Acting Assistant-Surgeon J. H. McGregor, U.S.A., to Officers' Hospital, Louisville, Ky.

Acting Assistant-Surgeon R. C. E. Jones, U.S.A., to Totten Hospital, Louisville, Ky.

Surgeon J. H. Grove, U.S.V., as Surgeon-in-charge, General Hospital, Rome, Ga.

MISCELLANEOUS.

Surgeon J. H. Thompson, U.S.V., has returned from leave and resumed his duties in charge of Hospital for Prisoners of War, Point Lookout, Md.

So much of Special Orders No. 158, May 5, 1864, from the War Department, as dismissed Surgeon H. J. Maynard, 1st Arkansas Cavalry, is revoked, he having rejoined his regiment, and been acquitted by a Military Commission of the charge of absence without leave.

NAVY.

Regular Naval Orders.

Passed Assistant-Surgeon Frederick E. Potter, ordered to take passage to Panama for duty in the Narragansett.

Passed Assistant-Surgeon J. H. Macomber, detached from the Naval Hospital, Chelsea, Mass., and ordered to the East Gulf Squadron.

Assistant-Surgeon Charles S. Green ordered to the Ohio.

Passed Assistant-Surgeon Ed. M. Steen, detached from the North Carolina, and ordered to the Naval Rendezvous, Brooklyn, N. Y.

Passed Assistant-Surgeon Arthur Matthewson, detached from the Naval Rendezvous, Brooklyn, N. Y., and ordered to the Saco.

Passed Assistant-Surgeon A. B. Judson, ordered to the Naval Hospital, Chelsea, Mass.

Assistant-Surgeon F. L. Du Boise from the Tioga and waiting orders.

Assistant-Surgeon Robert Willard ordered to the Susquehanna.

Passed Assistant-Surgeon Edward Matthews, detached from the Naval Academy, and ordered to the Naval Rendezvous, Providence, R. I.

Passed Assistant-Surgeon Henry M. Wells, detached from the Naval Hospital, Chelsea, Mass., and ordered to the Practice School Ship Sabine.

Surgeon J. D. Miller ordered to the Marine Rendezvous, Philadelphia, Pa.

Surgeon J. O. C. Barclay, detached from the Marine Rendezvous, Philadelphia, Pa., and ordered to the Susquehanna.

Volunteer Naval Orders.

Acting Assistant-Surgeon Charles Sturdevant detached from the Tahoma and waiting orders.

Acting Assistant-Surgeon G. A. Bright ordered to the Mingo.

Acting Assistant-Surgeon Samuel T. Holman ordered to temporary duty on board the North Carolina.

Acting Assistant-Surgeon George A. Warren appointed and ordered to the Mississippi Squadron.

Acting Assistant-Surgeon H. M. Rundlett ordered to the Mary Sandford.

Acting Assistant-Surgeon Isaac Coates detached from the St. Lawrence and ordered to the Mississippi Squadron.

Acting Assistant-Surgeon M. C. Drennan ordered to the St. Lawrence.

Acting Assistant-Surgeon B. F. Bigelow ordered to the Nyack.

Acting Assistant-Surgeon W. F. McNutt detached from the Mississippi Squadron and waiting orders.

Medical News.

MR. EDWARD PARRISH succeeds PROF. THOMAS in the Chair of Materia Medica in the Phila. College of Pharmacy.—DR. DUNLAP, of Springfield, O., employs permanganate of potash with great success in spotted fever, giving one-eighth to one-half a grain in solution, frequently repeated.—THE Surgeon of the Pirate Alabama was an Englishman, and his fellow students propose to erect a tablet to his memory.—THE guillotine is named from DR. GUILLOTIN, who proposed the law requiring that all criminals condemned to death "should be beheaded by means of a simple machine;" he did not invent the machine, as has been alleged.—DR. CARNOCHAN has amputated at the hip-joint five times.—PROF. GROSS has in preparation a third edition of his System of Surgery, and PROF. STILLE a second edition of his work on Materia Medica.—PROF. MILLER, of Edinburgh, is said to have been killed by a review of his "System of Surgery." The Times and Gaz. says: "He was a teetotaler, and consequently did not give his brain that rest and refreshment, that power of discarding and wiping out irritating and exciting trains of thought, which wine, temperately used, will confer. Had he taken a little wine, and excited himself less, he would have written a better book, and might have laughed at reviewers."—DR. ROBERTS BARTHOLOW has resigned his commission of Assistant-Surgeon U. S. Army, and entered into private practice at Cincinnati, Ohio; his address is 344 Race Street. DR. B. also proposes to engage in private instruction of medical students, or young men desiring to enter the army or navy.—PROF. WEBER, of Cleveland, O., is the President elect of the Ohio State Medical Society

Original Lectures.

LECTURES ON

GUNSHOT INJURIES OF THE ABDOMEN.

By FRANK H. HAMILTON, M.D.,

PROF. OF MILITARY SURGERY AND FRACTURES AT BELLEVUE HOSP. MED. COLLEGE, AND LONG ISLAND COLLEGE HOSPITAL; SURGEON TO BELLEVUE HOSPITAL; LATE MEDICAL INSPECTOR, U.S.A.

LECTURE VI.—PART VIII.

Gunshot Wounds of the Penis.

THESE accidents involve the danger of a troublesome hæmorrhage, especially when the corpora cavernosa are wounded; of extensive urinary infiltrations into the areolar tissue of the penis, scrotum, and perinæum; of the formation of permanent urethral strictures, and of contractions, with consequent deformity of the penis.

The hæmorrhage from the corpora cavernosa is not so likely to occur as a primary accident after gunshot injuries, as a secondary accident—the result of sloughing or of ulceration; when it occurs immediately after the receipt of the injury, and does not cease spontaneously, or upon the application of cold lotions, the surgeon may resort to the perchloride of iron as a direct application, or to the actual cautery, if required. In other cases it will be more convenient, perhaps, to apply a ligature, or several ligatures in succession, with the aid of a needle, in such a manner as to include more or less of the open cellular structure. In this manner I have myself once succeeded in arresting a hæmorrhage of this character. Finally, if other resources fail, a female silver catheter may be introduced into the urethra, and the penis may be compressed with a narrow roller.

The secondary hæmorrhages will be treated most successfully by cold applications, posture, perchloride of iron, and in some cases also pressure may be employed in the manner already indicated.

Extravasations of urine will be avoided by the timely introduction of a catheter, and by free external incisions. The surgeon ought to be constantly on the alert to detect the existence of extravasation when it has actually taken place, and which may be indicated only by the gradual spread of redness and tumefaction towards the scrotum, or in other directions; and whenever these signs are present, or there is even a reasonable ground of suspicion that urinary extravasations have taken place, no time should be lost in making free incisions. Very little harm can result from too early or from unnecessary use of the knife; but irreparable mischief, and even fatal consequences, often result from a few hours' ill-timed delay.

The tendency to the formation of urethral strictures and of contractions of the body of the penis are greater, perhaps, in this class of accidents than in almost any others, in consequence of the sloughing and actual loss of structure which occurs so constantly in the track of the wound; but we may often greatly diminish the gravity of the stricture, and sometimes prevent its occurrence altogether, by the persistent use of the flexible catheter or the sound. In order to accomplish this, however, the use of these instruments must be continued long after the wounds have closed, and until all further tendency to contraction in the urethra has entirely ceased.

McK—, a private in the 94th N. Y. V., was wounded at the battle of Manassas, Aug. 29, 1862, by nine buckshot, one of which penetrated the glans penis, near its extremity, splitting it in two; there were also two other holes through the glans made by other shot. When admitted to the hospital the urine escaped by three orifices, two of which closed spontaneously in a short time. In order to cure the slit in the end of the penis, the surgeon in charge made raw the edges of the fissure, and then brought them together with sutures. The result was a complete restoration of the form of the organ.

AM. MED. TIMES, VOL. IX., No. 6.

In the course of my practice I have met with examples of hypospadias or deficiencies of the lower wall of the urethra, but in which the natural channel of the urethra remained open, occasioned by chancres, and in which the repeated application of nitrate of silver as a caustic has served to accomplish a cure; but cases will be presented occasionally, and especially as the result of gunshot injuries, which will require the use of the knife and sutures, a catheter being kept in the urethra during the progress of the cure, both to prevent extravasations of urine, and to obviate the formation of a stricture.

In the number of the AMERICAN MEDICAL TIMES of March 19th, 1864, Surgeon S. W. Gross, U.S.V., reports the case of a conical ball encysted in the right cavernous body of the penis. The ball was received at the battle of Shiloh, April 7, 1862, and was found by Surgeon Gross lying about one inch from the pubes. A good deal of inflammation followed the injury, but at the end of two years it gave him no pain, and he could not be persuaded to have it removed.

My attention has been called several times to examples of retraction and consequent deformity of the penis, occasioned by the loss of more or less of the tegumentary coverings, and by the consequent cicatrization. Most of these cases are wholly irremediable.

Gunshot Wounds of the Scrotum and Testes.

These accidents present a great variety of complications, such as inflammation of the scrotum, bloody, serous, and purulent infiltrations into the cellular tissue of the scrotum, with sloughing, inflammation, and swelling of the testes, fungous growths from the interior of the testes, hernia of the seminal ducts, seminal fistulæ, atrophy of the testes, and inflammation of the cord.

The treatment must be conducted upon those general principles which the intelligent surgeon cannot fail to understand. Infiltrations require free incisions; inflammations of testicle demand rest in the horizontal position, elevation and support of the organ, and warm poultices or fomentations; cold applications are generally painful when applied to the testicles; fungous growths are to be repressed by pressure, astringents, and caustics; hernia of the seminal ducts can only be controlled by carefully graduated pressure; seminal fistulæ are seldom cured, but in most cases ultimately occasion atrophy, or render contraction necessary.

A very interesting and instructive example of gunshot injury of the penis, scrotum, and testes is reported in the number of the AMER. MED. TIMES of Oct. 17, 1863, in which extensive destruction of the scrotum ensued, and a flexible catheter having been broken off in the bladder, was successfully removed by Surgeon C. S. Muscroft, U.S.V.

A private in the 5th N.Y.V. was wounded at Manassas, Aug. 29, 1862, by a ball which passed through his right thigh and then through the corresponding testicle. A few weeks after the accident I found him in one of the hospitals at Washington, the wound in his thigh having closed, but the testicle had become almost completely atrophied, and continued to discharge a little matter through a fistulous orifice. The fact had not been positively ascertained, but I have no doubt the fistula was seminal.

In the same hospital (Rev. Dr. Smith's church) I saw a second case wounded in the same manner through the thigh and testicle, the testicle being less atrophied but throwing out a prolific fungus.

On the 30th of July, 1861, I saw in the Seminary Hospital at Georgetown, a private from the 79th Pa. V., wounded by buckshot in the scrotum, but in which case very moderate inflammation had ensued, the shot not having penetrated the testicle.

Col. —, of the cavalry, was wounded near Brentwood, Tenn., by a ball which traversed the scrotum and the body of the penis near the root. When I visited him in Nashville, Tenn., on the 20th June, 1863, a few days after the injury, I found very little swelling, and the catheter was retained in the urethra without much inconvenience.

The following is an example of contusion of the cord from a ball which, after entering the skin, was deflected in a somewhat remarkable manner:—

Alex. J. Dougherty, private, 13th Ind. Vols., was wounded Nov. 2, 1861, near Holly Creek, Va., by a round ball, which entered near the top of the left trochanter major, and passing across in front of the pubes, became lodged under the skin of the right thigh, at a point a little below its middle, and upon the outer aspect of the limb. At the time he was seen by me eleven months had elapsed, and he was on duty with his regiment at Suffolk, Va. The ball could be distinctly felt very near the surface, in the position which I have described, but as it gave him no inconvenience he declined to have it removed.

When he was wounded he felt first a sharp pain over the bladder, and subsequently on the in-side of the right thigh and testicle. The testicle occasionally becomes swollen.

Additional Cases of Penetrating Gunshot Wounds of the Abdomen, the Ball not being Removed.

Samuel Whipple was wounded by a pistol ball in a railroad riot while acting as a special policeman in behalf of the company, on the 20th of January, 1855. The muzzle of the weapon was within a foot of Whipple when it was discharged, and the ball entered on the left side of the thorax, between the seventh and eighth ribs, penetrating the diaphragm, passing through the stomach, making two openings in this viscus, and lodging in the muscles of the loins. A portion of his clothing was carried into the wound by the bullet, but it was withdrawn immediately by the persons who were near him. I saw him soon after the receipt of the injury, and found him pale, almost pulseless, his left leg completely paralysed, and breathing with great difficulty; his breathing was of that peculiar spasmodic character which usually indicates a lesion of the diaphragm. He died in about four hours, in consequence of an internal hæmorrhage occasioned by a rupture of the bloodvessels in the cavity of the abdomen.

We adopted no treatment, except to attempt to relieve his intense suffering by the free use of morphine.

In the following case no grave symptoms ensued:—

George McIntosh, private, 79th N. Y. Inf., received a round ball on the 21st of July, 1861, in the abdomen. The ball entered on the left side, about midway between the umbilicus and the anterior superior spinous process of the ilium, and could not be found. It did not pass through. The wound was dressed only with lint wetted in cool water, and up to the ninth day, when I last saw him, no peritonitis had occurred. The wound was discharging a little pus, and its edges were slightly inflamed. He received a furlough on the 31st of July, and since then the records of his hospital furnish no account of his case.

Original Communications.

SPURIOUS PREGNANCY;

ITS SYMPTOMS, DIAGNOSIS, AND TREATMENT, WITH A RECORD OF CASES.

By EDWIN NESBIT CHAPMAN, A.M., M.D.

(Read before the Kings County Medical Society.)

(Concluded from page 51.)

CASE IX.—E. L., æt. 30 years, the mother of two children, has the following symptoms:—Menses every third week, free, and lasting from six to eight days; bowels regular; appetite variable; tenderness over the stomach on pressure; no gastric disorder, no hysteria, and no pelvic irritation or suffering. Her husband left for the war in January, 1863, and in the last part of April following she felt movements in the abdomen. Four and a half months after feeling these movements, her size was equal to that of a woman at the ninth month, and her breasts were distended with milk. When the supposed full term had arrived, she

was taken with pains, which lasted for three days, and were violent enough to cause her to seize hold of some object to steady and support herself. After this she had no more pains, the distension of her abdomen gradually subsided, her breasts grew smaller, and the milk dried up. In January, 1864, the symptoms of pregnancy had disappeared. In June following, when I first saw her, she was suffering from nervous prostration and gastric disorder. She was ordered resinous purgatives and iron. Whether her health was completely restored is not known.

Commentary.—The subject of spurious pregnancy, though of high practical import, has not received that attention from systemic writers which its obscurity would seem to demand. In truth it is scarcely alluded to, except incidentally, when the signs of pregnancy are discussed; and never with a completeness sufficient to aid the general practitioner in diagnosing such cases, or understanding the phenomena they present. The few instances recorded in the medical journals stand as isolated facts—rare and curious facts—but no one thinks they are other than exceptional, or that the morbid condition can be studied to advantage or explained satisfactorily. Hence a mystery hangs over this disease and shrouds its causation in an obscurity so great that well educated physicians frequently commit the most grievous blunders, which perhaps are only rectified at the commencement of a spurious labor, when an empty womb is determined by the touch.

Diagnosis.—The diagnosis the first three months is well-nigh impossible, since a congestive state of the uterus and its appendages will occasion the same sympathetic phenomena as a genuine pregnancy—enlargement and shooting pains in the breasts, changes in the areolæ and their follicles, etc.—but there is this difference, disease produces an unnatural pregnancy a physiological congestion of the uterus; in the former the general health will deteriorate and be gradually undermined; in the latter it will remain intact, or, if disturbed at first, will subsequently improve, as is shown by a good appetite, vigorous digestion, increase in flesh, and a full, firm pulse. In almost any case, when the menses have failed, should we have evidences from the pulse, the desire for and the proper assimilation of food, that the organic functions are carried on with regularity and in perfection, we may be tolerably certain that impregnation has taken place; since a morbid condition of the uterine organs would specially involve the ganglionic nervous system, and perturb or subvert every function over which it presides. When gestation has advanced three and a half to four months, the line of demarcation between the morbid and the physiological becomes more clearly defined, the breast-signs are better pronounced, and the enlargement and gradual growth of the uterus are very apparent to the touch. When the indications of gestation above mentioned increase steadily for some weeks, you may form all but a positive diagnosis.

From four to five, and five to six months, no practitioner is excusable in not being able to give a proper answer, and deciding positively the existence or non-existence of impregnation; since now, in addition to the more characteristic changes in the breasts and the presence of the bulky uterine globe that is detected by palpation and the touch, or both united, the movements of the child, perceptible to the mother and the attendant, ballottement and auscultation will determine beyond a peradventure the fact of conception. Nevertheless, the most experienced accoucheurs, at this or even as late as the full period, have at times been at fault, being at the outset misled by the spurious symptoms of pregnancy, and finally confirmed in the error by the patient asserting that she feels the movements of the child.

Professor Bedford relates a case, in his work on Obstetrics, of a lady suffering with ascites, so strenuously positive as to the reality of her pregnancy, of which she was certain from the strong movements of the child, that she frequently wrung from him an equivocal but reluctant assent that he also felt these movements. He was thus led

on, without making an examination, to the completion of the nine months, when, false labor pains setting in, the uterus was found undeveloped. The lady died four days subsequently.

Dr. Keiller (Monthly Journal, and Braithwaite, No. xxii. page 313) relates a case of spurious pregnancy to which he was called by the attending physician to perform the Cæsarean section by reason of the very painful and protracted nature of the labor, which had reduced the patient to the verge of exhaustion. The motions of the child could be felt and seen distinctly, and were thought by the patient to be so violent that it seemed as if the child "would leap through her side." Professor Simpson, in his recent work on the Diseases of Women, relates a great many instances of this morbid condition; but his apparent desire to make much of his subject, his statement that virgins may have the disease, as had been observed in the case of sluts excluded from the society of the male at the time of "heat," his assertion that spurious imitates actual pregnancy so perfectly as to be its exact counterpart, and his grouping under this head all cases where a woman suspects or fears that she is pregnant, form such a jumbled, distorted, and colored picture, that his descriptions are devoid of practical value, and involve us in greater doubt and hesitation than the silence of other obstetrical writers. The truth is, that a spurious pregnancy like those that I have related, is only of occasional occurrence, and can be diagnosed usually without much difficulty.

Cause.—The cause appears to be an irritation of the uterine organs, not from morbid growth, congestion, inflammation, or any other pathological state open to the investigation of our senses; but from a defect in, or absence of, the menstrual function, from an irritability caused by excessive coitus in the newly married, from the change of life, or from displacement of the uterus, as we observe in partial retroversion or retroflexion. When the menses are scanty or absent for some months, we almost invariably find the bowels torpid, flatulent, and distended, the stomach nauseated, filled with morbid secretions and loathing food, and the liver overcharged with its secretion, as is evinced by the dusky, yellow state of the skin. The nervous system is seriously implicated, as the whole family of the neuroses testify, and seems to be imperfectly sustained in its due balance by a defective blood. At this point the mind loses its healthful tone and may become the prey to any illusion. Should the female desire offspring very much, she will very likely brood over her disappointed hopes, and eventually become a monomaniac on this subject. In my opinion, the menstrual fluid is both a hæmorrhage and an excretion, and does, like the bile, eliminate from the blood certain noxious elements which, if retained, disorder the circulation and perturb the nervous system. Probably most cases of pseudo-pregnancy may be referred to an imperfect functional activity of the uterus, and the perverted state of mind thence arising. The remainder arise from some obscure irritation of the generative organs. The condition has some analogy to hysteria in the torpid, distended, and flatulent state of the bowels, the unbalanced mind and the perversion of the nerve centres, and doubtless is one of the protean forms of this disease. As the abdominal muscles are put upon the stretch, and are consequently fatigued and weakened, some of their fibres may contract irregularly and spasmodically, and thus imitate the movements of a child in utero.

Treatment.—The treatment of spurious pregnancy is sufficiently indicated by the cases related above. A pre-requisite to a satisfactory management of any case is a positive diagnosis, so clearly made out that we can unhesitatingly dispel the woman's false hopes. The illusion must be banished before we can hope to combat successfully the functional disturbances that attend in its train. Of these disturbances, the most marked are torpor of the liver and atony of the muscular coats of the digestive canal. Purgatives of the resinous kind, with or without mercurials, according to the state of the biliary secretion, will be de-

manded in most instances for the restoration of the stomach, bowels, and liver, to a proper discharge of their offices. Occasionally it will be necessary for the expulsion of flatus to make the cathartic medicine stimulating and carminative by the addition of asafoetida or turpentine. As the muscular coats of the intestines have, by distension, lost their tonicity, we must re-awaken excitability and contractility by local stimulation, and then continue this impression for some days; but when a proper action of the bowels is renewed, this must be eventually sustained by laxatives, or preferably by vegetable articles of diet. Order having been restored in "the storehouse and shop of the whole body," the elements of nutrition will be presented to the blood, which, if defective, may now find the materials for its reparation. Should the red globules be deficient, we may now resort with advantage to some of the many preparations of iron. As the blood is renewed the nervous system will feel the quickening influence, animal force and vigor will radiate to every part of the system, and the generative organs will be restored to their normal condition. Thus menstrual irregularities or deficiencies will be remedied, and the immediate cause, frequently, of the patient's infatuation will be removed. If displacement of the uterus, by irritation of the organic nervous system, conspires to the production of the spurious symptoms of pregnancy, the use of pessaries, or other means, will be necessary before a permanent cure can be effected. In fine, we must banish the hallucinations of the patient, and then correct the functional disorders, whatever they may be, that have arisen as results.

I will in this connexion relate a case of nymphomania that came under my notice in June, 1862, that seemed to arise from a premature cessation of the "courses." A. M., æt. 44 and single, has had her menses suppressed for ten years, with the exception of a few months four years ago, and one "turn" two months back, when she had a considerable "show." She was brought to the clinique by a female friend. She was moping, spiritless, gloomy, and greatly distressed in mind, and had fled the house of her employer, where she had lived many years, for fear she might commit some overt act, some great indiscretion, with her master's son, a boy eighteen years of age. She stated, without any reserve or apparent violence to her delicacy, that she had the most uncontrollable passion for this young lad, could not bear to have him a moment from her sight, and had a burning desire to sleep with him. She struggled against these feelings, being, according to the statement of her friend, a person of rigid morals, and one having a high sense of religious duty, but eventually the infatuation became so complete and irresistible that she suddenly took safety from her temptation in flight. The patient was corpulent and full-blooded, had a wild, nervous excitability about her, would not eat for fear of poisoning, and suffered from gastric, hepatic, and intestinal disorder; yet she was not entirely bereft of reason, as was evident from her leaving her master's house to avoid temptation, and her ready assent to an examination for uterine disease, which I thought might be the cause of her present state. The examination revealed the hymen intact, but failed to disclose any disease of the uterus or vagina. This patient was sent to the Lunatic Asylum at Flatbush, and nothing further of her history has come to my knowledge. To me it seems clear that the symptoms in this case arose from the amenorrhœa, and that the patient's blood was poisoned by the retention of certain elements that should have been eliminated by the menstrual fluid, whence originated this peculiar manifestation of hysteria. Her real condition was not far removed from that other monomaniacal class—the subjects of an imaginary pregnancy.

SARRACENIA PURPUREA, which our readers will remember was so much lauded for the cure of small-pox, has proved useless in Dr. Marston's hands (see *Lancet*, 1863, vol. ii, p. 6), every case, fifteen in number, having proved fatal.

REMARKS ON
AURAL POLYPI,
WITH ILLUSTRATIVE CASES.

By D. B. ST. JOHN ROOSA, M.D.

ASSISTANT SURGEON TO THE NEW YORK EYE AND EAR INFIRMARY.

AURAL POLYPUS may be described as morbid growths, the product of an ulcerative process, and as having their origin either from the cavity of the tympanum, the membrana tympani, or the external auditory canal. Some writers on Aural Surgery, prominent among whom is the distinguished Mr. TOYNBEE, make distinct classifications of these growths; this, however, upon reflection, seems to us unnecessary. They are analogous in structure to exuberant granulations, occurring wherever an ulcerative process has been going on, assuming various shapes, and being of varying consistency—in general somewhat lobulated, and always extremely vascular and gelatinous. If this view be correct, it leads to simplicity in diagnosis, and takes away all the pomp and mystery which are attached to them in the books. Its adoption would lead to the abandonment of the belief, so prevalent among the laity and originally inculcated by the profession, that an aural polypus is a tumor growing from some part of the auditory apparatus, independent of any morbid process; that it becomes a cause of the coexisting deafness by mechanical obstruction; and that its removal will restore the hearing.

This erroneous opinion leads to great error in prognosis, for the surgeon who removes a polypus has but begun his work, and that work is—subduing the purulent process which gave origin to the morbid growth, and this previously occurring affection is that deafness.

It is true that the removal of a polypus will generally improve the hearing, but I am not aware of an authentic case where it has perfectly done so, unless the origin was from the drum.* Toynbee's cases give one the idea of perfect restoration of the hearing, but on careful reading, such statements as the following will be found:—"Months after removal—hearing distance with the watch, six inches; and in other cases, three inches and two inches." If the reader but remembers that the normal hearing distance with an ordinary watch is more than thirty-six inches, he will readily believe that the word "cure" has no proper place in Mr. Toynbee's description of the cases in question. In the other cases cited in his chapter on Aural Polypi, no definite accounts are given as to the amount of hearing power, the statement being made that the "patient can now hear perfectly," without the data for the opinion.

It may as well be stated here that there is no function which patients are so unwilling to acknowledge the loss of as that of hearing, and none where they so magnify a slight improvement. Their statements, therefore, should be taken very little into account, but the hearing distance with the watch, or the process of repeating words after the surgeon, the patient not seeing the mouth of the examiner, should be the tests from which conclusions are formed.

WILDE and TOYNBEE are very distinct in their assertion that aural polypi generally have their origin in the external auditory canal. WILDE says that eight out of a dozen have their origin there, while the remaining four spring from the cavity of the tympanum. KRAMER has most commonly seen them arising from the membrana tympani. TRÖLTSCHE finds them generally arising from the cavity of the tympanum, sometimes from the membrana tympani. The cases which I have seen incline me to a view similar to this latter, that aural polypi most commonly have their origin in the cavity of the tympanum. Theoretically, this is the most probable origin, when we consider that the cavity of the tympanum is lined with a mucous membrane, while neither in the external auditory canal, nor on the outer layer of the membrana tympani, does this structure obtain; it is here common integument, a little thinned.

We all know that polypi in other situations spring from mucous membrane. If, moreover, we examine into the history of cases of polypi of the ear, we shall almost always find them preceded by a purulent inflammation and long continuing discharge. I am fully persuaded that in the larger majority of cases this purulent inflammation has its origin in the cavity of the tympanum, and not in the external auditory canal; and at some future time I hope to present the statistics which have led me to this view.

In many of TOYNBEE's cases in which he speaks of polypi having their origin externally, he alludes to a perforation of the membrana tympani as seen after the removal of the growth. If they generally have their origin from the external auditory canal, they would indeed be but a mechanical obstruction, and their removal, together with the restraining of the purulent discharge (a very easy matter while the middle ear is healthy), would restore the hearing, just as when inspissated cerumen or foreign bodies are removed from the meatus. It may also be observed as pertaining to this subject, that laymen and physicians will leave an otorrhœa a surprisingly long time without any attention, considering it as not much of an affair; but when a polypus makes its appearance, they rush to its treatment and wonder why the hearing does not return, since the "tumor" is removed. Comment on such an irrational course of action is unnecessary.

The treatment of these growths necessarily consists in their removal, and that by excision with curved scissors—WILDE's snare, or TOYNBEE's forceps, or with the ordinary dressing forceps. When the growths are very small, only caustics need be used. The after-treatment consists in the removal of their cause, the so-called "otorrhœa," but better named—purulent inflammation of the middle ear, or of the external auditory canal. This consists in restoring the mucous membrane and integument involved to a healthy condition by astringents, caustics, etc., while the congestion of the pharynx and lips of the pharyngeal entrance of the Eustachian tube is also attended to. This congestion of the pharynx and the muscles acting on the soft palate and lips of the orifice of the tube, is the almost invariable accompaniment of purulent inflammation of the middle ear; the affection almost always beginning here as a catarrhal inflammation, passing along through the tube to the cavity of the tympanum, and when the disease has gone on to a filling up of the cavity of the tympanum, nature, by a conservative process, breaks through the membrana tympani, and we have an "OTORRHœA INTERNA" making its appearance.

The conclusions reached may be stated as follows:—

1. Aural polypi are morbid growths, analogous to exuberant granulations.
2. They are the result of a long continued purulent inflammation of the external auditory canal or cavity of the tympanum, generally of the latter.
3. Their removal will not immediately restore the hearing, and generally will never completely do so.

CASE I.*—Ann M., æt. seven, presented at clinique Dec. 25th, 1863. When patient was six months old she had an attack of scarlet fever and mumps, ever since which time she has suffered from a purulent discharge from the ear; sometimes blood has mingled with the pus; never has had pain in the ear. The specular examination of left ear shows a polypus, seeming to have its origin from the membrana tympani, about as large as a bean, of a pale-red color. Right ear normal. Ether was administered, and the growth removed bit by bit with the angular-toothed forceps. The base of the growth was then brushed with a solution of arg. nit. gr. xx. ad ʒj.

This application was continued once a week for two months at the Infirmary, the patient using a solution of powdered alum, a drachm to the pint, twice a day at home,

* The notes from which the two first of these cases are collected, were taken by Dr. Wm. Stimson, House Surgeon at the Infirmary. The cases are all taken from a number, without any particular selection.

* Vide Toynbee on Diseases of the Ear, pp. 116 et seq.

when the discharge had ceased and hearing distance had become normal.

CASE II.—Eliza J., æt. six, March 12th, 1864. Patient has had trouble with her right ear for two years. The first that the mother recollects concerning it is that the child complained of "earache," for the relief of which a poultice of roasted onions was applied, affording relief; but a discharge occurred two days after, which has continued with occasional interruptions up to this time. For the last six months the discharge has consisted of mingled blood and pus. Has pain, referred to the ear, every few days. Hearing distance with watch one inch. Specular examination shows a purulent inflammation of the cavity of the tympanum, with a perforate membrana tympani. There is also seen a small lobulated polypus, having its origin in the cavity of the tympanum, only the peripheral portion of the drum remains.

The ear was thoroughly cleaned with warm water, and a solution of nitrate of silver applied with a camel's hair brush, and a solution of sulphate of zinc gr. ij. ad ʒj. ordered, to be used at home after cleansing the ear. Patient did not return to clinique.

CASE III.—Girl, æt. eight, patient of a gentleman practising in Brooklyn, who, on being called to see the child, discovered a polypus in each ear, and advised their removal. At his request I undertook the care of the case. The polypi extended out to the auricle on each side, and the patient heard only the loudest sounds, the watch not at all; modulated her voice very badly, although she has not forgotten how to speak. Some five or six months previously had scarlet fever, which was followed by otitis and otorrhœa; hearing became gradually impaired, until present condition was reached.

The child was placed under the influence of chloroform, and the polypi removed with a small dressing-forceps. They were very irregular in shape, bright red, and externally vascular. A solution of *ferri persulph.* was applied, and the third day after, a specular examination showed the origin of the polypus on one side to have been the cavity of the tympanum, while that of the other could not be clearly made out, though seemingly the same. A perforation of the drum existed on the side where the base of the polypus was clearly traced. Nitrate of silver in solution was applied daily by the gentleman under whose care the patient was, and a chronic tonsillitis attended to one week later. The voice is modulated much better, and patient hears the watch when pressed upon the auricles; the discharge had wholly ceased; hearing about the same.

CASE IV.—Alice H., June 28th, 1864, æt. fourteen. Five years ago patient had scarlet fever, followed by an otorrhœa on right side. A few weeks ago a growth was discovered filling up the right ear. It has been the frequent subject of earache. Last treatment subjected to was blistering over mastoid process. A polypus of very soft consistency is seen extending to margin of meatus. It was removed with the small dressing-forceps nearly down to its origin, which was found to be in the cavity of the tympanum, through a perforate drum. The base of polypus was touched with undilute nitric acid. Directions given that warm water be poured into the ear frequently to relieve the pain, and that a solution of alum be used as an astringent. The watch could not be heard at all on the affected side before the polypus was removed. At present writing, after three applications of the undilute nitric acid and the continued daily use of the alum lotion, the discharge has ceased, periphery of drum is seen intact, and the watch is heard at a distance of three inches from the ear.

CASE V.—A man æt. sixty, porter at the Infirmary, July 13th, 1864, has had a discharge from one ear for years. Two weeks ago the one which had been previously sound began to pain him very much. A purulent inflammation of middle ear, with perforation of the drum, was recognised on side longest affected. Hears watch pressed on the auricle; other side shows an acute inflammation of

the drum and meatus. Leeches ordered to tragus, hearing distance about one-half inch; one week after, hearing distance four to six inches. Pain has disappeared; quite a purulent discharge remains, with several small polypoid growths, each about as large as a pea, attached to anterior aspect of external auditory canal. The parts were thoroughly cleansed and brushed with a thirty-grain solution of nitrate of silver; lotion of alum ordered to be used twice daily until patient is seen again.

137 LEXINGTON AVENUE, July 21, 1864.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, July 6, 1864.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

THE PROPRIETY OF DETAINING WELL PERSONS AT QUARANTINE WHO ARRIVE AT THIS PORT FROM INFECTED VESSELS.

THE discussion upon this measure was presented in the following series of questions:—

I. *Under what circumstances can typhus fever be communicated from one person to another?*

II. *What is the danger of communication from fomites?*

III. *To what extent would a fever hospital endanger the health of residents in a neighborhood?*

DR. A. N. BELL, of Brooklyn, by appointment, opened the discussion of these different questions by a reference to the effort which was now being made by the joint Boards of Emigration, Quarantine, and Health, to reestablish the system of detaining at Quarantine such emigrants, not suffering from fever, who arrive at this port in infected vessels. He was willing to admit that typhus fever was communicable, but he believed that such communicability was mainly confined to those places and circumstances wherein the causes which originally give rise to the disease were continuing to act. Typhus was a disease endemic to the British Isles, and the emigrant was peculiarly liable to suffer, because in the first place he is strongly predisposed to it from the fact of his having been subjected to its endemic influences from childhood; then the depression of spirits which is generally the attendant upon leaving his home to go among strangers, the prostrating effects of sea-sickness, his spare diet, and above all the crowding on board ship, tend strongly to invite the attack. Besides, too, he is not physically in a condition to resist these combined influences against him, as he has been generally living, while at home, on very spare and for the most part unnutritious diet. He stated that the different contagionists fix the period of incubation from seven to seventy-two days, and yet they state it as their belief that the disease is not communicable beyond a few feet, or yards at most, and that it is rare in a well ventilated hospital for the disease to be communicated from one bed to another. Dr. Bell maintained that by wholesome food, cleanliness, fresh air, etc., the poison may be, and often is, eliminated from the system without resulting fever, no matter what was the period of supposed incubation. Consequent upon this belief, he was radically and uncompromisingly opposed to the detention of well persons at Quarantine, maintaining that it was the duty of sanitarians to look to the proper cleaning of the ship, the clothing, and other "things," rather than to the individual. It is true that the person should himself be first thoroughly cleansed and be provided with a change of clothing, but after that he considered that it was the duty of the authorities to allow him to go at large.

He maintained, too, that the old system of detention resulted in a great many needless deaths among the emigrants and community, which, under the present regulation, might have been prevented. He was convinced that there was greater danger of communicating the disease from the various densely populated Irish districts than from the poor

American Medical Times.

SATURDAY, AUGUST 6, 1864.

RESULTS OF ISOLATION OF FEVER.

THE establishment of a Fever Hospital by the Commissioners of Public Charities and Correction, to which we have before alluded, is an important event in the history of typhus in New York. It is destined to determine beyond a doubt some interesting questions upon which medical opinion is divided. It has now been in operation upwards of two months, and some of the results which have been obtained are of sufficient interest to be put on record.

This is the first time that typhus has been isolated from the other hospitals under this Government. It was customary to have separate wards set apart in Bellevue Hospital, which were called "fever wards," but there was no very rigid quarantine established. The result was, that always when typhus prevailed, it extended beyond the limits of its special wards, and cases occurred among the patients in the house. The greater number of medical officers and superintendents of hospitals have acted on the theory that typhus was not very contagious, and the efforts to isolate it have not been very strenuous. This is not surprising when we find such authority as FLORENCE NIGHTINGALE advocating the plan of distributing typhus through general wards. But whatever theoretical speculations may have been entertained heretofore, no candid observer can doubt that, during the present epidemic, in Bellevue Hospital the question of the propriety of the complete isolation of fever patients from general patients has now been definitively settled. It was only after a large number of patients and resident physicians had been attacked by the disease, and the death of several of the latter, that sufficient interest was awakened to lead to decisive action. If any further evidence were needed of the intense contagiousness of typhus than that furnished by the past history of fever in Bellevue, we have it in the records of the Fever Hospital during its short existence. The fever cases are at present placed in tents on Blackwell's Island. On entering the hospital the patient is first undressed, bathed, supplied with a clean hospital shirt, and placed in bed, and the clothing is removed and washed. The tents are near the water's edge, the sides are raised, and the sweep of fresh air is constant and generally very strong over the floor and beds. No perceptible odor is ever noticed in or around the tents, nor does there seem to be the slightest difference between the internal and external air. And yet no less than six unprotected attendants, who even did not sleep in the tents, have contracted the disease within this short period. Such an argument in favor of the complete isolation of typhus is unanswerable. It would apparently be quite as rational to distribute small-pox through the general wards of a hospital where the patients were unprotected, as to distribute typhus. Another lesson which we may learn from the above fact is this—fever attendants should always be protected by having once had the disease. It is wrong to allow nurses or friends who have not thus been rendered exempt from the disease to attend, or even visit the sick.

The second fact of interest developed by the fever tents

emigrant fresh from the ship; in fact, many emigrants had been known to take the fever from these places when they had actually escaped it on shipboard, and had been in the interior several months. It was his belief that as long as these high towns were allowed to exist, the community would be subjected to the same causes which at present exist in New York itself. In regard to the danger of fever hospitals to residents in their neighborhood, the conditions of safety were all fulfilled by healthy locality, ventilation, and disinfection against fomites.

Dr. J. M. SMITH believed that poison of typhus fever was a poison developed by the decomposing excretions of the human body, and hence the disease was most apt to break out in crowded and ill-ventilated apartments; and was confident that people in health, who were exposed to such places, would take the fever. He maintained that it would be dangerous to allow emigrants from an infected ship to go at large in a community, as there was great danger of spreading the disease from the fomites. He spoke strongly in favor of the establishment of fever hospitals, and maintained that no physician or nurse should attend upon the patients unless he himself had been protected by having the fever previously. Referring to the danger of fomites, he stated that at one time one of the wards of the New York Hospital, which had contained fever cases, was to be cleansed. But before it was considered safe for the workmen to scrape the walls, the apartment was thoroughly ventilated night and day for a week. Yet, notwithstanding this precaution, several of the workmen took the fever, and two of them died of it. He did not think it was necessary to detain well persons at Quarantine any longer than was sufficient to insure them a thorough cleansing.

Dr. GRISCOM agreed with Dr. Bell in regard to the communicability of the fever, and referred in that connexion to the occurrence at the New York Hospital cited by Dr. Smith. He also referred to several examples of the great benefit of free supply of fresh air in the treatment of this class of cases, and stated as his belief that a fever hospital, if founded in a healthy locality, would not in any manner endanger the health of the surrounding inhabitants.

Dr. A. CLARK expressed himself in a most unequivocal manner in favor of the opinion that typhus was contagious. In regard to fomites, he stated that he had not known of a single case of fever occurring among those employed in the storeroom where the clothes of all the fever patients were kept, and yet he has known many persons who had taken the disease by going into the wards where the patients were congregated. He thought that any healthy person was safe at a distance of from three to four feet from the patient, and that the risk of contagion was considerably diminished by a thoroughly cleansed and ventilated apartment. In conclusion, he referred to one or two examples of the contagiousness of typhoid fever.

Dr. HARRIS believed with Dr. Clark, that the poison was contagious, and that no amount of fresh air and bathing could eliminate it from the system when it was once introduced.

The Academy then adjourned.

THE dried stem of the *Laminaria Digitala*, or Sea-tangle, is much recommended by Dr. Sloan of Ayr, as a substitute for ordinary tents in surgical practice, from its property of expansion on absorbing moisture after having been introduced in the dried state.

THERE were 76 deaths in Providence during the month of June. The mortality of the first six months of the present year has been 35 greater than in 1863, and 104 greater than the average for nine years. During the last two months it has not been greater than the average, taking into consideration the increase of population. Scarletina still continues with considerable severity, and the number of deaths during the first six months of this year is the same as during the whole year 1863.

is the immense value of the open-air method of treatment. The exposure of the patients to the fresh air is as great as it would be if they were placed under a shade tree in an open field. The following facts are obtained from the records of the Fever Tents for the month of July just closed:—The number of cases treated was 86, of which 5 died and 81 recovered, giving a mortality of 1 in 16.2, or 6.1 per cent. Of the five deaths, one died fifty hours after admission, one had chronic cystitis and abscess of the kidney apparently of long standing, and one had pneumonia. The cases were, on an average, of a severe type, the eruption was always present and profuse, convalescence rarely beginning before the sixteenth day. The treatment was nourishing broths, sponging, etc., without stimulants or any form of medication, except simple remedies to meet symptoms. This remarkable percentage of recoveries seems justly attributable to the open-air method of treatment. For, if we compare the mortality in the same class of cases when treated only a month or two before in the "fever wards" at Bellevue, we find that 1 in 9, or 11 per cent., died, a mortality nearly twofold greater. A wider comparison of statistics make the results of open-air treatment still more strikingly favorable. The death rate in the London Fever Hospital, after making all the deductions, is 1 in 5 $\frac{2}{3}$, or 17.9 per cent.; the mortality in King's College Hospital, in the service of Dr. Todd for a term of 18 years, was 25 per cent.; at the Edinburgh Infirmary the mortality varies from 20 to 25 per cent.; at the Glasgow Infirmary it has been from 16 to 18 per cent. The general average of all these institutions is 18 per cent. Dr. MURKINSON, after a statistical examination, concludes that the mortality from typhus may be assumed to be one in every five attacked.

We have stated that no special formula of medication was adopted, the whole reliance being placed upon fresh air, sponging, and nourishing broths. Four-fifths of the cases received no other treatment. It is interesting to compare the results obtained with some special methods of treatment. Bloodletting gives a mortality of upwards of 20 per cent.; stimulants about the same; quinine 25 per cent.; acids, as employed at Bellevue among the same class of patients, 10 per cent., etc., etc. The comparison proves the truth of RUTTER's remark:—"The poor, left to nature and God's good providence, recover."

The lessons already taught by the fever hospital may be thus stated:—*First*, the necessity of quarantining typhus; *second*, the importance of removing it from general hospitals; *third*, the necessity of excluding all attendants, nurses, and physicians, who have not been protected; *fourth*, the value of open-air treatment. We may well congratulate the Commissioners of Charities upon the success which has attended their effort to establish a fever hospital. It bids fair to become one of the most important of our public institutions.

VACCINATION IN THE MILITARY AND NAVAL SERVICE.

Too little regard is still paid to the thorough protection of soldiers and sailors against small-pox. From widely different points we hear of the prevalence of this dread scourge in our army and navy. It is only by repeated revaccinations performed by skilled persons that exemption can be secured. In a discussion before the Epidemiological Society, London, Mr. MARSON (*Lancet*) expressed his

opinion strongly that, judging from the amount of small-pox in both public services, a large proportion of the troops and of the crews of our ships are at this moment imperfectly protected. His experience from year to year only strengthens his conviction that if vaccination and revaccination were uniformly practised as effectively as they ought invariably to be, the disease would be almost unknown in the army and navy, notwithstanding the exposure of the men in foreign countries and in colonies where it is so frequently prevalent. During the last twenty-eight years not a single nurse or servant in the Small-pox Hospital has caught the malady! This signal immunity has been due to the precaution of revaccinating *thoroughly*—that is, so as to insure a considerable degree of local irritation, if not distinct vesicles, around the punctures—every one immediately upon his admission into the establishment. There is too much reason to believe that a large proportion of so-called revaccination which, under the influence of the recent epidemic of small-pox, has been performed during the last year or two in the metropolis and many parts of the country, has been not much better than a sham—nominal rather than actual. In reference to the far greater exemption of the continental armies as compared with the British Army, Mr. MARSON drew attention to the circumstance that revaccination has been repeated at intervals of a few years only, and not merely performed once, as has been usually done with us.

LUNACY COMMISSIONS.

At the last meeting of the Association of Superintendents of American Institutions for the Insane the subject of the appointment of Lunacy Commissions was brought forward, and elicited much discussion. It was scarcely to be expected that such Commissions in any form would find favor in that body, and we are not surprised at its action. We can at this time do no more than record its conclusions, embraced in the following resolution, and reserve for another occasion our comments:—

"Whereas, certain State Legislatures have taken such preliminary action as looks to the appointment of what are called Lunacy Commissions, therefore be it—Resolved, That, in the opinion of this Association, the appointment of such commissions, with a view to official visits, etc., or any supervision of State or Corporate Institutions for the Insane in this country, is to be deprecated as not only wholly unnecessary, but injurious and subversive of the present efficient system of control by Boards of Trustees or Managers appointed by the State Executives or the proper authorities of Corporate Institutions, and performing their prescribed duties without pay or emolument."

Correspondence.

A GLIMPSE OF REBEL SURGERY.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR—A little manual of Military Surgery, published by the Rebel authorities, was recently loaned me by an Acting Assist.-Surg. serving with the 2d Army Corps; and as we all feel anxious to know how our neighbors on the other side of the line get along in the practice of surgery, I have thought that a few extracts from it, with a running commentary (founded upon my experience of nearly three years in active field service), would be interesting to your many military readers, and not at all distasteful to those of your subscribers who may be practising in the peaceful path of life.

I therefore beg to inclose you some extracts, with a request that they may appear in your valuable journal.

The book is entitled "A MANUAL OF MILITARY SURGERY, prepared for the Use of the Confederate States Army, by order of the Surgeon-General," and bears the imprint of "Ayres and Wade, Richmond, Va." It is in pamphlet form (in paper covers), and is evidently modelled after Dr. STEPHEN SMITH's excellent little manual of Operative Surgery, from which, indeed, most of its illustrations appear to have been copied. The engraving is, however, done in the roughest manner. The book professes to be merely a compilation "adapted to the use of medical officers in the field," but now and then we come across an original passage, a few of which I propose to refer to.

HOSPITAL GANGRENE.—After describing the causes and appearance of this "child of the typhus," the author divides the treatment into prophylactic and curative. As the former, he specifies fresh air, cleanliness, and disinfectants. "When the disease makes its appearance, nothing short of a complete segregation of each case as it occurs, with a liberal use of disinfectants, can guard against its further spread."

As the curative treatment, he advises quinine and iron internally, with a generous use of stimulants and good diet; and, as a local application, he says:—

"The practitioner of the present day can have no hesitation in giving the preference to chemically pure nitric acid unless hæmorrhage should be present, when the actual cautery should be substituted."

No mention whatever is made of the bromine treatment, so popular in our hospitals; and indeed in no single instance is any reference made throughout the whole book to any Union authority, or to any book published in the Northern States; while, however, the English authors are freely quoted from. The chapter on gunshot wounds is almost entirely from Longmore.

HÆMORRHAGE he divides into primary and consecutive; and of the latter variety he makes the subdivisions "retarded," "intermediary," "secondary," and "inter-determinate." Of retarded hæmorrhage he gives examples:—

"During the engagements around Richmond, from the several battle-fields of Seven Pines, Mechanicsville, Gaines's Farm, and Malvern Hill, large numbers of wounded crowded our hospitals. Some of the wounds had been carefully dressed by the surgeons in the field infirmaries; others came in to be attended for the first time in the General Hospital here, often less than five miles from the scene of action. The surgeon could not fail to observe the very large number, comparatively, whose wounds began to bleed freely after arriving in hospital. Such was the case, at least to a remarkable extent, at the four Georgia hospitals, crowded at that time with the wounded from these bloody fields; these were all cases of *retarded hæmorrhage*, taking place from eight to ten hours after the receipt of the injury. The bleeding in these cases was most probably due to the excitement and disturbance of transportation, and to the removal from the open air of the field to the closed walls of the hospital."

While on the subject of hæmorrhage he makes the following strange observation regarding the effect of the administration of chloroform:—

"We should remember that in the hæmorrhage which occurs during *operations under chloroform*, and immediately after, the arterial blood is almost invariably of a dark venous color, sometimes nearly black, owing to the fact of the chloroform vapor having replaced the atmospheric air; and, though this seems to sustain respiration, it does not change the color of the venous blood in the lungs."

This seems to us a remarkable statement, and one not borne out by our observation. Were it so, in the many operations performed after a battle, and in nearly all of which chloroform is administered, the fact could not fail to be recognised by even the most ordinary observer. One fact alone would disprove it. There are very many surgeons in this army, who, in their amputations, never depend upon their anatomical knowledge for the location of an

artery, but rely solely upon a slight turn of the tourniquet and the few drops of bright red tell-tale blood which flow from the divided arteries, and mark their location.

We do not doubt that if the chloroform vapor replaces the atmospheric air, the blood will fail to be oxygenated; but we do doubt if respiration can be supported, as is alleged by the author, by the vapor alone. Therein lies the danger in the administration of chloroform by unskilled hands. Most of the deaths which have resulted from the administration of chloroform have been due to the fact that the vapor was not sufficiently mixed with atmospheric air. To this fact is its much more relative safety in field military practice due; for, administered as it usually is, in the open air, the patient cannot fail to secure, with the anæsthetic vapor, the proper amount of oxygen.

In the general treatment of hæmorrhage he relies upon *opium*, which he considers "as important to the surgeon as gunpowder to the ordnance officer; for, besides, the ages of pain for which it is the reprieve as an anodyne, it saves rivers of blood as an hæmostatic."

Quinine he regards as another valuable constitutional remedy in cases of secondary hæmorrhage from the smaller vessels, which he considers often dependent upon "the febrile excitement which attends upon the early stages of a gunshot wound."

Cold air he regards as a most valuable hæmostatic, and one too frequently overlooked by the military surgeon—a fact to which we beg to add our testimony.

So impressed is he with the hæmostatic value of cold air, that he bases his treatment of penetrating chest wounds upon its effects. The hermetically-sealing treatment so ably advocated by that talented and accomplished young surgeon, Assist.-Surgeon B. Howard, U.S.A., therefore finds in him no supporter. He says:—

"In penetrating wounds of the chest, where the lung is wounded and bleeding, the patulous condition of the external wound may be considered favorable to the arrest of the hæmorrhage; it affords exit to the confined blood, and at each effort at inspiration air enters the cavity of the pleura. On its first introduction the air is cold, and acts as a local styptic; but, as with each inspiration the quantity increases, and also expands from the warmth of the cavity, the wounded lung is subjected to an equal and powerful *compression* as by a tight and evenly applied bandage, is made to retire up to its bronchial and vascular attachments near the spinal column—it can no longer dilate to receive the laryngeal current, its circulation is consequently greatly diminished; it obtains, or is compelled into that 'rest,' which 'is the condition of recovery.' The hæmorrhage ceases, the external wound closes, and by a gradual process, whether of absorption or otherwise, the pleural emphysema is removed. But in the meantime the wound in the lung has finally cicatrized; and, in gradually resuming its functions, all danger of hæmorrhage has passed away. Such has been the result of our observation of chest wounds of the kind referred to above during the present war. Men are frequently brought to the hospitals with these penetrating wounds of the chest. They are suffering from dyspnoea; percussion shows extensive pleural emphysema; auscultation detects no respiratory murmur anywhere on that side; the lung is evidently compressed. Many of these cases have been left on the field all night without the attention of any surgeon, and most of them recover under treatment in the hospitals. Reflection, in such cases, would lead to the precept: *to leave the chest-wound open for a considerable time, and so far from dreading and preventing the entrance of air into the pleura, to favor it on account of its hæmostatic effect.* Compression of one lung, produced in a gradual manner, seldom destroys life; hæmorrhage often does."

He is very much opposed to the treatment of hæmorrhage of the lung by "the time-honored absurdity of venesection," which he thinks has met with favor, because coming to us "embalmed in the dicta of the 'highest authority,' and consecrated by the owl's wisdom of the

ancients." He expresses himself gratified to learn that not one case is reported "wherein this expedient was practised by a surgeon of the Confederate States."

THE TRACK OF A BALL he lays much stress upon, as a guide to the ligation of a wounded artery. He compares the track of a projectile to

"A tunnelled highway through a solid mass, crossed at some portion of its course by a tubular stream; a culvert which, when entire, conducts a living tide to a glowing region beyond; but now, breached and interrupted, the stream is diverted and wasted at one or the other end of the tunnel, leaving pools and sediment here and there throughout its course. All along this highway the anatomist has his beacons, his finger-posts, and his mile-stones, by which he shapes his course and measures his distances, in seeking any particular point."

We wish to reach the bleeding artery. We know that the track has crossed it somewhere, and at the very place which is bleeding, for in the making of the track the wound was made; we know also the general course and position of the artery. Now, if either end of the track happens to be the shortest route leading directly to the opening in the artery, we enlarge it to reach the vessel; but if there is any much more direct route through the sound skin and muscle, we cut down and bisect, the track greatly assisting us in finding the arterial wound. Thus far the track is our great rallying point, and has the most important value in the operation; beyond that, none at all."

AMPUTATIONS.—Under this head he advances nothing particularly new. He gives it as the opinion of the "majority of leading surgeons," that "the circular operation is *par excellence* the operation to be selected whenever the circumstances of the case will permit. This statement carries greater weight in military than in civil practice."

However true this may be in Rebel military practice, it certainly is not true of this army. A vast majority of the operating surgeons of this army are enthusiastic in favor of the flap operation. Certainly by far the largest proportion of amputations are of the double flap variety. It certainly appears to us to have many advantages in military practice over the circular method. It is more expeditiously performed (and in field practice this is no small consideration), bears transportation better, and makes a better stump for the application of an artificial limb. The great argument, that in the circular method the arteries, being cut transversely, are much more easily secured, can have but little weight—it appears to us, with one who aspires to be an operating surgeon; for does he not possess the requisite dexterity to catch the arteries in a flap amputation, it is pretty evident that operative surgery is not his particular forte.

Entering the service strongly impressed in favor of the circular method of amputation, we long since abandoned it in our practice for the flap operation, believing the latter much preferable in military field surgery. A few days ago, in conversing upon the subject with Dr. Le Roy McLean of Troy, N.Y. (formerly surgeon of the 2d New York Vols., and operating surgeon of the 3d Brigade, 2d Division, 3d Corps), a most excellent surgeon and careful observer—he remarked upon the fact observed by him at Fredericksburg recently—that of the wounded received there from the bloody fields of Wilderness and Spottsylvania Court House, in nearly all the circular amputations the skin sloughed.

Our author teaches that, in catching an artery with the tenaculum, its point should be made to traverse the vessel, and not be introduced into its calibre. He thinks it unnecessary to cut off one end of a ligature, as "the sharp, cut extremity is a source of as much, if not more, irritation than the smooth continuous thread."

He thinks wet dressing "unnecessary in amputation through normal textures."

He expresses an opinion that "metallic sutures are pre-

ferable," an observation most fully borne out by our experience.

Yours etc.,

J. THEODORE CALHOUN,
Assist.-Surg. U.S. Army.

CITY POINT, VA., July 9th, 1864.

THE AMERICAN MEDICAL ASSOCIATION.

(To the Editor of the AMERICAN MEDICAL TIMES.)

SIR—Several articles have appeared in your paper since the late meeting of the American Medical Association, calculated to give your readers the idea that its present status is such that it is not entitled to much respect either as an ethical or a scientific body.

Perhaps the conclusion reached may be true, but as some of the means made use of to establish it are, to my mind, objectionable in nature and false in assumption, I ask of you space to point out some of the fallacies, confining myself for the present to one point.

A stumbling-block with you, and the chief one with your correspondent M.D., and the Philadelphia *Medical News and Library*, appears to be the failure on the part of the Association to select Prof. Mott as its President. This seems to be regarded as a great blunder, and taken to evidence such obliquity of mental and moral vision that we may safely count it the forerunner of an early imbecility, if not of a premature demise.

Now I think it may be laid down as a safe conclusion that when the Association gets into such an unfortunate condition that there is but one man to be made President who can save it from "sinking into hopeless imbecility," we had better let it go to the tomb.

There are two principles which may govern an organization in the bestowal of its honors, each of which has its merits; policy, taste, or other circumstances deciding which shall govern. Acting upon one principle, we look around for a prominent man who has been the active and steadfast friend, who has labored hard and constantly for our welfare, always present, and ready to promote our interest and maintain our rights, and on that man we bestow our smiles and decorate him with our highest honors as a reward for his well-doing and an encouragement to others; acting on the other principle, we cast about for a man who has preëminence and weight among his fellows and with us, independent of any act of ours, but who has manifested no particular friendship for us, nor has he been especially inimical, and upon him we smile and clothe him with the greatest dignity we have to dispense, for the purpose of attaching him warmly to our cause, making him active in our behalf, and bringing his wide influence and extended fame to assist in our prosperity.

The American Medical Association at its late meeting acted upon the former principle, and selected for the honors of its presidency Dr. N. S. Davis, a tried and true friend, constant in his attendance, vigilant in interestedness, and active and timely in his labor, since the first inception of the Association in 1846. Perhaps herein the Association did wrong, and should have acted upon the latter principle, and rested its presidential honors on Valentine Mott, who has attended its sittings but once (when held at his own door in New York in 1853), and, so far as I know, has never raised his hand or voice in its behalf, but who has an eminent reputation and a professional standing, domestic and foreign, that has few living rivals.

If the Association erred in this affair, it is quite apparent that it was an error of judgment compatible with the best intentions for its own prosperity and usefulness, and it is scarcely probable that M.D. was inspired solely by a desire to foster fraternal feeling in the profession, and enhance the power of the Association to do good, when he wrote that (see *MEDICAL TIMES* of July 9), "instead of selecting some eminent man to preside over its meetings, whose name would do honor to the Association, the present policy would seem to be to lift some ambitious and comparatively unknown individual, of mediocre ability

and attainment, from his provincial obscurity, and confer on him a transient notoriety (fame it cannot be called), which will suffice for a lifetime of empty boasting and conceited egotism." This reads as if its author were spleeny somewhat.

No deliberative body of any considerable size can transact parliamentary business satisfactorily without an efficient presiding officer, and I heartily unite with you in sentiment that "however greatly an audience may be annoyed by the vaporings and impertinences of a few shallow delegates, there is still some relief in the prompt action of an efficient chairman. But this annoyance becomes twofold more aggravating when it is aided by a stammering, doubting President, wholly ignorant of his duties." But unlike you, I think medical men are scarce who have a good knowledge of parliamentary law, and it is still more rare to find one who has the knowledge, who possesses also the ability to apply the rules with promptness, vigor, courtesy, and tact, all essential to the perfect chairman. This thorough qualification for a presiding officer is almost incompatible with the greatest devotedness to medical science and the most solid eminence as a practitioner, because they require lines of study quite divergent, and the associations of such a medical man bring him but rarely into the presence of the practical operation of parliamentary rules. Many men could prepare themselves, presently, for the duties of a chairman, but, as you suggest, the term of one year is not sufficient for the purpose. Nevertheless, as the presidency is the position of especial dignity and honor in the Association, it must be refilled annually, whether with a parliamentarian or otherwise.

Some of the past meetings of the Association have been rendered unsatisfactory, and probably less profitable, for the want of a more efficient presiding officer, and the like will recur in the future if some method is not devised to bring about a better condition of affairs.

How, then, can we continue to confer the honor of the presidency annually upon a new man selected from the proper class, and yet have constantly a good parliamentarian to conduct the deliberative business? I will answer this question at another time, merely premising now that a plan can be devised that will meet the demand.

Your correspondent M.D. says of the Association: "The chief interest manifested by large numbers of its members, at its recent meeting, seemed to be in the choice of its President and other officers; and very slight observation sufficed to show that the election of a certain individual was a foregone conclusion from previous caucusing and correspondence." One can appreciate the force of this sentence, whatever else can be discovered in it.

At the meeting last year I opposed the election of Prof. Davis to the presidency for reasons which were, to me, quite sufficient, but in no way connected with his loyalty, nor otherwise personal to him; I went to the meeting this year feeling that he was the proper man for its president, but I had never a word with any other man upon the subject, nor had written, nor received a line in relation thereto. On the morning of the meeting, after seeing the name of Prof. Mott so injudiciously presented in the MEDICAL TIMES, I made inquiry among my acquaintances in the Hall as to the feeling in the premises, and did not meet with one whose opinion did not accord with my own. Except some backing and filling in the New York delegation, while selecting a member to represent it in the nominating committee, this is all the management I heard of before that committee assembled for duty. Possibly there may have been previous correspondence and caucusing by others; all I can say is, that if there was, it did not come to my knowledge, and certainly there was no need of it.

It would seem, therefore, that if "the election of a certain individual was a foregone conclusion," it arose out of the fitness of things, and not in anywise, so far as I discovered, from consultations prior to the assembling of the Association.

In the nominating committee the imputation of disloyalty was made against Prof. Davis, and so completely and overwhelmingly disproved, that one is quite surprised to see it again brought up in a public journal and in a manner at once impertinent and offensive, not only to Prof. Davis, but also to his active friends. One is slow to believe that any gentleman having a proper regard for the profession, or a reputation of his own to suffer, would make the charge of disloyalty that M.D. has in the first paragraph of the article hereinbefore cited, without adducing the proofs to sustain it. With so much of it as appertains to Prof. Davis personally, I have nothing to do; but as a member of the American Medical Association I now demand of M.D. that he furnish, publicly as he made the charge, the facts upon which he rests so grave an accusation. If he brings forth proof to sustain himself, I shall be among the foremost to insist upon Prof. Davis and his immediate backers being brought to punishment and disgrace; but if M.D. has nothing but the partisan rumors springing out of the filthy pool of politics, that were so completely and satisfactorily exposed during the late meeting of the Association, I trust he will be visited with the shame and confusion that should overwhelm a public defamer.

While upon this first paragraph of M.D.'s, I respectfully ask an elucidation of the closing sentence which reads: "We trust we shall never again be compelled to hear a retiring President electioneer, in his inaugural address, in behalf of his successor." I shall be glad to learn whether this is a slip of the pen, an anachronism, or a paradox. Prof. March was the retiring President at the late meeting, but he delivered his inaugural address last year, when he was inaugurated. Prof. Davis delivered an inaugural address this year, but he will not be a retiring president until next year. As I did not hear the electioneering in behalf of a successor, I cannot tell to which party the odium attaches.

CONSERVATOR.

July 16, 1864.

UNITED STATES GENERAL HOSPITALS.

THE McPHERSON GENERAL HOSPITAL, VICKSBURG, MISS.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR—This hospital, named after Gen. McPherson, and now in charge of Surgeon E. Powell, was the City Hospital of the rebels. It is located on the northeast borders of the city, on an elevation commanding a view of the city and the entire country within the outer line of fortifications, or third range of hills. It is thus favored with fresh air, good drainage, and comparative exemption from local miasmatic influences.

It should be understood that Vicksburg is encircled with three ranges of hills, upon the first of which the city is chiefly built. On an elevation of the second range the McPherson Hospital is located; and on the third range, probably three miles from the river, is the outer line of defences. Camping grounds should never be selected, except from military necessity, between the first range of hills and the river, on account of the excess of miasmata floating in the air currents off the river basin. These air currents seldom reach the summit of the second range of hills, and consequently the McPherson Hospital, in point of location, possesses some advantages which a few hospitals of more favored countries might covet.

The building itself is formed after the architectural model of most of the structures of the vicinity, private as well as public, of any pretensions in this vicinity. It is a well-proportioned, square building, consisting of two stories and a basement, with spacious halls running from front to rear, opening at each end on a veranda. From the sides of these halls, are the entrances into the wards, which are large, well lighted, and airy, and contain altogether about two hundred beds. At the right of the entrance are the Surgeon's office and reception room, and directly across the hall from these, the dispensary. Beyond the dispen-

sary, and at the left of the centre of the hall a spacious stairway extends from the summit to the basement.

As originally constructed, the wards were mostly small, each one having a single room and window. Under Yankee administration, their partitions have been knocked away, and three or four wards thus converted into one.

There has never been any provision made for ventilation, except by doors and windows, which, in this latitude, afford an abundance of pure air the greater part of the year, but an inadequate supply in cold and rainy weather. The ceilings are high, and thus, with doors and windows closed, each patient is allowed one thousand cubic feet of air. On entering the wards, most of them were entirely exempt from hospital odor.

The beds appear to be well furnished and comfortable, a considerable number of them having been supplied with hair mattresses, these having been obtained, with many other comforts, by means of the hospital fund derived from commutation of rations. There is an insufficiency of chairs and some other hospital furniture, at present, but these things are *expected* from the medical purveyor. There is a surplus of *cotton* sheets, shirts, drawers, etc., supplied by the good friends of the Sanitary Commission, which would be very gratefully exchanged for *woollen*. It would be well for their friends to be informed that woollen is much better and more needful for the sick soldier than cotton.

In the basement are two kitchens, one for light food and delicacies, the other for heavy food and ordinary diet. The cooking is done with stoves, which seem to answer very satisfactorily. Here is also the commissariat, well stored with rations, and comforts obtained by the hospital fund. This fund, in prudent and faithful hands, enables the sick of military hospitals to share many articles of diet which it is more difficult, if not impossible, for them to reach in civil hospitals. This fund in the McPherson Hospital averages about \$1,000, with a monthly addition of about \$300, which is appropriated by the surgeon in charge to the benefit of the sick soldier, in the purchase of furniture and other comforts, which cannot or do not come from the medical purveyor. In the basement is also the bath-room, the ironing-room, etc., and everything about the house is orderly, neat, and systematic.

The McPherson Hospital is a Government trust ably and faithfully cared for. It could not have been placed in better hands. Were one-half of Government officials as able and true as Dr. Powell, fewer loyal lives would have been lost and more rebels killed.

Outside of the main building is the wash-house; a hennery, which produces from ten to twenty eggs per day; and the convalescent camp. It is the intention, also, to erect a gymnasium. The importance of gradual transition from the inactivity of ward life to the exposures of camp life, seems to be fully appreciated and provided for. The soldier is thus more certainly cured and the hospital effectually and permanently relieved.

The principal diseases in this hospital at the present time are miasmatic. There is considerable pneumonia, and a few gunshot wounds from the recent Yazoo expedition and the Missouri regiment which was fired into by guerillas while descending the river. A kind of facial erysipelas prevails in this vicinity at present, from which the inmates of the hospital are not exempt. It usually commences with inflammation of the throat; this extends through the nerves and lachrymal ducts, and the first indication of facial erysipelas is a redness around the superior extremity of the duct, which spreads and covers the whole face. It seems to be contagious. The treatment is painting with t. iodine, and tonics.

In October, 1863, 313 patients were treated; 128 returned to duty and 17 died. In November 215 was the aggregate number treated; 52 were returned to duty and 14 died. In December 151 were treated; 58 were returned to duty and 7 died. In January, 1864, 187 were treated, and 13 died. Of this number treated, 52 were for

miasmatic diseases and 18 for pneumonia. During the first three weeks of February, 98 were admitted, 22 returned to duty, and 3 died. The mortality will compare favorably with that of any hospital in the country.

In rebel hands, the hospital had provided for only seven or eight at a time, one small stove having been sufficient to do the entire cooking. At the time of the capture of Vicksburg, about seven hundred wounded Confederates were lying about the grounds, where their chivalrous brethren had abandoned them to the generosity of the Federal surgeons. The hospital and its surroundings were then in a crowded and ragged condition, the building itself having been entered and lacerated with shell before the yellow flag was hoisted. But the energy and ingenuity of the surgeon in charge soon brought order out of chaos, and a creditable curative institution is now the monument of his fidelity.

Yours, &c.

M. E. W.

VICKSBURG, MISS., 1864.

SHALL WE CHANGE OUR FEE BILLS?

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR—In the number of the AMERICAN MEDICAL TIMES for the 16th July, the Editor puts "the question to the medical profession at large if it should not now everywhere raise its 'fee bill,' and increase its rates in common with the movements of every other department of industry," and I take the liberty to answer it for my part with a decided "No." But do not understand me to say that no notice should be paid by the profession to the changed circumstances in which we find ourselves. Such a course would be suicidal. My position is, that an amended fee bill will not meet the difficulty, or, at best, will do so for a brief period only; and changes in the "fee bill" are always attended with more or less of notice from the newspapers, often to the serious injury of the profession. The remedy for the difficulty is a simple one, and is in the hands of each practitioner. It is simply to recognise the fact that all the trouble arises from "the depreciation of the currency." Continuing, then, to use the old "fee bill," and reducing the charge to the currency rate in proportion, the income will continue to be actually proportioned to the labor performed. This *sliding* scale, though complicated in appearance, is so only in appearance; but enables one easily to reckon up the proper sum due for services rendered, however high or however low the actual value of currency may be. When it shall again return to the value of gold, the fees will be the same as before the relative value of the two was caused to vary. On this principle I have made my charges for the last six months, not always, perhaps, coming up to the full amount of the premium on gold, but approximating to it, and have found no difficulty arising from it. The sufficient answer to any intimation that the charge is not the old one is, that the charge will be the same if the pay is the same.

There is one view of this matter that is worthy of consideration; that is, how to make the charges in our books when the account is to stand six months or a year. Thus, if in January last I charged at the rate of \$1.50 for each dollar of the fee table, and when the collection is made such changes have occurred that I am charging \$2.00 for the dollar of the fee bill, shall I make my collections at the face of them, or at the present rates? If the former, I only receive that which is worth three-fourths of my fee; and I therefore believe the latter to be the true principle, and as such I commend it to the profession.

The truth is, we must bring our fees to a gold basis or no one can tell what his income is, or on what principle to estimate his services. If we do not, and call the "greenback" a dollar in fact as well as name, we shall find ourselves in a position similar to that of a person in a railroad car looking at a train upon a parallel track and thinking how rapidly it moves past him, till he suddenly awakes to the

disagreeable fact that it is he who has been going backward.

RUSTICUS.

Army and Navy.

ARMY.

ORDERS, CHANGES, &c.

APPOINTMENTS.

Daniel E. Beltz, John J. Montgomery, Edward Frothingham, Augustus W. Wiggin, Henry Agnew, W. H. Coe, F. J. Fitch, Bernard Seinig, B. M. Kimball, E. A. Santee, Jos. Jorgenson, Ira L. Davies, to be Medical Cadets, U.S.A.

Charles Zeigler, William H. Huff, Milnor Preston, and David Kinzer, U.S.V., F. P. Hughes and W. A. Taylor of Philadelphia, Pa., G. J. Ainsworth of Vermont, R. A. Ivers of Massachusetts, and Allen Keebler of New York, to be Hospital Stewards U.S.A.

DECLINED APPOINTMENT.

George De Grassi, of New Jersey, the appointment of Assistant-Surgeon of Volunteers.

LEAVES OF ABSENCE.

Assistant-Surgeon C. Irving Wilson, U.S.A., for thirty days, with permission to remain in Washington under medical treatment.

Lieutenant-Colonel Peter Pinco, Medical Inspector, U.S.A., for thirty days.

DISCHARGES, DISMISSALS, ETC.

Assistant-Surgeon G. W. H. Kemper, 17th Indiana Volunteers, dishonorably dismissed, having applied for a discharge after having availed himself of the furlough granted his regiment as Veteran Volunteers.

Surgeon Willis H. Twiford, 27th Indiana Vols., honorably discharged on account of physical disability, having tendered his resignation.

Assistant-Surgeon John R. Smith, 136th New York Vols., discharged for physical disability and absence without leave, he having failed to file the necessary Surgeon's certificate of disability in the Adjutant-General's Office.

Hospital Chaplain Joseph M. Driver, S.V.V., discharged by direction of the President.

Assistant-Surgeon Henry Ulrich, 108th Ohio Vols., discharged on account of physical disability and for absence without leave, he having failed to file the necessary Surgeon's certificate of disability in the Adjutant-General's Office.

Hospital Steward Hiram B. Putnam, U.S.A., honorably discharged at his own request.

Hospital Steward Victor Rudloff, U.S.A., discharged for inefficiency.

Hospital Steward Michael Dowling, U.S.A., discharged for incompetency.

ORDERS.

Surgeon Eugene F. Sanger, U.S.V., is relieved from duty in the Middle Department and will report in person to the Medical Director, Department of the East, and by letter to the Commissary General of Prisoners, for duty with Prisoners of War at Elmira, N. Y.

Hospital Chaplain William M. Daily, U.S.A., is relieved from duty at Madison, Ind., and will report to the Superintendent of General Hospitals, Springfield, Ill., for duty at General Hospital, Camp Butler, Ill.

Surgeon J. M. McNulty, U.S.V., is relieved from duty in the Department of New Mexico, and will report to the Commanding General, Army of the Potomac, for assignment to duty.

ASSIGNMENTS.

Assistant-Surgeon N. M. Glatfelter, U.S.V., to the Depot Field Hospital, 9th Corps, City Point, Va.

Surgeon James H. Peabody, U.S.V., as Medical Director, District of Nebraska, Omaha City, Neb.

Surgeon S. B. Hunt, U.S.V., as Surgeon-in-Chief, District of the Frontier, Fort Smith, Ark.

Surgeon George H. Hogehoom, U.S.V., as Surgeon-in-charge, General Hospital, Fort Leavenworth, Kansas.

Surgeon J. S. Hildreth, U.S.V., as Surgeon-in-charge, City Hospital, Chicago, Illinois.

Surgeon R. Niccollo, U.S.V., as Surgeon-in-charge, Field Hospital, Rome, Ga.

MISCELLANEOUS.

All applicants for commissions as Surgeons and Assistant-Surgeons in Colored Regiments who may come to Louisville, Ky., to report themselves to Brigadier-General Thomas, will report themselves to Colonel R. C. Wood, U.S.A., Assistant Surgeon-General, for examination. Of those who may pass a satisfactory examination, five Surgeons and twenty-six Assistant-Surgeons will be instructed by the Colonel to report in person to Bvt. Major-General Burbridge at Lexington, Ky., for assignment to regiments.

Assistant-Surgeon George H. Horn, 2d California Volunteers, has been transferred as Surgeon to the 1st California Volunteers.

NAVY.

Regular Naval Orders.

Assistant-Surgeon Watson C. Hull, of the Seminole, resignation accepted.

Assistant-Surgeon Robert T. Edes, ordered to the Naval Hospital, Chelsea, Mass.

Volunteer Naval Orders.

Acting Assistant-Surgeon H. M. Rundlett, ordered to take passage to Charleston, S.C., for duty on board the Mary Sanford.

Acting Assistant-Surgeon M. C. Drennan, ordered to the St. Lawrence.

Acting Assistant-Surgeon B. F. Bigelow, ordered to the Nyack.

Acting Assistant-Surgeon W. F. McNutt, detached from the Mississippi Squadron and waiting orders.

William L. Wheeler, appointed Acting Assistant-Surgeon, and ordered to the West Gulf Squadron.

Oran A. Rives, appointed Acting Assistant-Surgeon, and ordered to the Mississippi Squadron.

Roland G. Woodward, appointed Acting Assistant-Surgeon, and ordered to the Ohio.

Medical News.

ROBERT M. DE WITT, of New York, has in press, and will publish in a few weeks, a new work on "Morbid Tumors," by Rudolf Virchow, Professor of Pathological Anatomy, &c., Berlin.—*Boston Med. and Sur. Jour.*

DR. WILSON, Lecturer on Midwifery, Glasgow, advises the use of Sea-tangle for dilating the os and cervix uteri, the mucous discharges being sufficient moisture to cause the expansion of the tent. We have heard of the use of the same substance in the form of bougies in stricture of the male urethra in one of our Dublin hospitals. It is capable of being applied in a variety of ways. Dr. Wilson has found the young tangle expands more readily and more largely in proportion to its size; however, the older tangle exerts a more powerful dilating effect. They possess many advantages over sponge-tents.

NEW HAMPSHIRE ASYLUM FOR THE INSANE.—From the last Annual Report of Dr. Baneroff, Superintendent of the Asylum, we learn that on the 1st of May, 1863, there were in the house 204 patients, of whom 94 were males and 110 females. There have been admitted since that time 105—56 males and 49 females—making in all who have enjoyed the benefits of the Asylum 309—namely, 150 males and 159 females. Sixty-nine have been discharged, of whom 38 were males and 31 females. Twenty-nine males and 14 females have died. There are remaining in the Asylum on the 1st day of May, 1864, 217; of these 103 are males and 114 are females. The largest number on any day was 219; the smallest number was 192.

At the annual meeting of the Mass. State Medical Society, DR. O. W. HOLMES recited a poem on the late DR. JOHN WARE and his son, DR. ROBERT WARE, who died in the Department of the South; DR. JOHN ORUOGNAUX, of New York, addressed the Society in a very felicitous manner.—The new City Hospital of Boston was recently dedicated; it consists at present of two pavilions, which accommodate 150 patients; cost, \$500,000.—DR. C. T. JACKSON has donated his private collection of minerals, valued at \$10,000, to the Museum of the Society of Natural History.—At the late annual meeting of the Ohio State Medical Society PROF. WENER offered the following resolution, which was adopted amid tremendous applause: "Resolved, That the thanks of this Society, as well as the good wishes of all the good citizens in the land, are eminently due to our venerable fellow-member, J. G. ROGERS, M.D., of New Richmond, Ohio, for the skilful manner in which, on the morning of the 22d of April, 1822, he assisted into this world ULYSSES SIMPSON GRANT, the Commander of the American Armies, the hero of Vicksburg, and the predestined destroyer of the great rebellion."—At a dinner given to DR. A. N. GUNN by the citizens of Staten Island, on the occasion of his retirement from the position of Health Officer at the port of New York, the following toast was read: "Our distinguished guest—the Gunn who is about to go off—with the report which will re-echo through the future history of Quarantine—well done, good and faithful servant."—DR. ISAAC CUMMINGS, the late active and efficient House Physician to the Demilt Dispensary of this city, has resigned his situation in that institution and accepted the position of surgeon on the Panama Railroad. He is to be stationed at Panama.—DR. HORACE GREENE returned from Havana some months ago with his health much improved. He is now at his residence in Sing Sing.—DR. MAPOTIER, Prof. of Hygiene in the Royal College of Surgeons in Ireland, states that "in America unsanitary influences are so rife that one of the rarest things to be seen is a hale elderly man."—It has been rumored that PROF. J. C. DALTON has resigned his situation in the College of Physicians and Surgeons. This is an error; PROF. DALTON has resigned his place in the army, but retains his Professorship.

Original Lectures.

LECTURES ON THE TREATMENT OF STONE IN THE BLADDER.

DELIVERED BEFORE THE CLASS IN THE MEDICAL
DEPARTMENT OF THE UNIVERSITY OF
THE CITY OF NEW YORK.

By ALFRED C. POST, M.D.,

PROFESSOR OF THE PRINCIPLES AND OPERATIONS OF SURGERY, ETC.

LECTURE I.

GENTLEMEN—A great variety of methods have been devised for the purpose of relieving the sufferings and warding off the dangers which are attendant upon the presence of calculous concretions in the urinary bladder. Some of these methods are simply palliative in their character, aiming merely to relieve suffering or to prolong life. Other methods are designed to effect a radical cure by removing from the bladder the offending agent. These various methods of treatment may be comprehended in seven distinct classes, which I have ventured to designate by the names *lithiatry*, *lithecboly*, *lithospasty*, *litholysis*, *lithectomy*, *lithotripsy*, and *lithotomy*. Some of these names will be recognised as in common use among medical writers; the others are original with myself. The introduction of these terms, analogous in their etymology with those which have been sanctioned by long use, appears to me to be well calculated to give precision to our ideas on the subjects to which they relate.

The first method is denominated *lithiatry*. This term is derived from *lithos*, a stone, and *larpeia*, medical treatment. It is used to indicate the treatment of stone in the bladder, and of the symptoms to which it gives rise, by the use of internal remedies, by regulating the hygienic circumstances of the patient, and, in short, by all the appliances of art, independently of surgical operations. The principal aim of this method of treatment is to diminish the amount of suffering arising from the presence of stone in the bladder; to improve the general health of the patient; to remove any complications which may exist, or to ward off such as may be threatened; and to retard the growth of the stone, or to remove asperities from the surface. Attempts have frequently been made to effect a radical cure of the disease by medical treatment. For this purpose various remedies have been administered, which have been supposed to have the power of so modifying the constitution of the blood and of the urinary secretion as to secure the gradual solution of the stone by the urine, and its expulsion from the bladder. Some of these remedies have gained great reputation as lithontriptics, or disintegrators of calculi. But more extended observation has demonstrated that their efficiency is much less than was formerly attributed to them. And at the present day there are few persons who have any strong confidence in the efficacy of this class of remedies, with the exception of the dupes of charlatans, who derive their emoluments from the credulity of persons suffering from the disease who are too timid to apply for surgical relief. In ancient times physicians were in the habit of prescribing lithontriptic medicines for the cure of urinary calculi. Pliny speaks of the lithontriptic virtues of the shells of snails.—*Hist. Nat.*, Lib. xxx., Cap. VIII. Various remedies of this class have been employed in modern times. Among them all no other one acquired so large a reputation with the profession and with the public as a nostrum which was administered by a Miss Stephens, a lady belonging to a respectable family in Berkshire, in England. So remarkable were the repeated cures effected by this remedy, that Parliament appointed a commission, composed of eminent physicians, to investigate its claims. A formidable report was presented, and a compensation of forty-five hundred pounds sterling was awarded to Miss Stephens in consideration of her revealing the composition of the remedy. The chief ingredients were soap and egg-shells. For some time after the composition was revealed, there was considerable diversity of sentiment among medical men as to the efficacy or inefficacy of the remedy. But after a time, with the removal of the mystery, the remedy gradually fell into disuse. In France, the Académie des Sciences commissioned M. Morand to make trial of the remedy, and to report the results. His report was published in the *Mémoires de l'Académie des Sciences* for 1740 and 1741. He reported the results of his observations in forty cases, which he divided into four classes.

In the first class were five persons affected with "diseases of the kidneys and bladder, other than stone." Partial relief was afforded in some of these cases, but the symptoms were aggravated in those who had pus mingled with their urine.

In the second class were eight persons, male and female, who were affected with gravel. Two of these thought themselves entirely cured, four were more or less relieved, and the remaining two experienced no benefit. Several of these patients passed stones, some of which were of considerable size.

In the third class were five patients, who were supposed from their symptoms to have stone, but had not been sounded. One of them, 55 years old, took the remedy three months, and his symptoms entirely disappeared. Three others were relieved; two of them passed entire stones, and one passed portions of stone in the form of scales.

In the fourth class were twenty-two persons, from three to seventy-nine years of age, in whom not only the rational symptoms of stone existed, but the presence of calculi had been detected by sounding. Six had used the remedy but a short time; one of these had been considerably relieved; one had been constrained by his sufferings to undergo lithotomy. Sixteen had taken the remedy for a considerable time. Eleven of this number were adults, and five were children; four of the children did not seem to be relieved. These four underwent lithotomy, and there was nothing in the appearance of the stones taken from them to indicate that the remedy had exerted any solvent power. The fifth child seemed to be somewhat relieved. Four of the eleven adults thought themselves cured, but would not allow themselves to be sounded. Four were much relieved, and the remaining three did not seem to be benefited. Morand, in speaking of the results of his observations, makes the following remark:—"When a patient suffering all the symptoms of stone, and using remedies, passes at first with his urine a thick sediment, then scales or fragments of stone, and becomes able to retain his urine, which becomes gradually more and more clear, and then ceases to suffer, and finds himself in a condition to bear all sorts of carriage exercise, I say that it is not reasonable to ascribe to chance so many happy circumstances." During the following year, Lieutaud and Morand met with calculi taken from patients who had used Miss Stephens's remedy, and appearing perforated, and as it were worm-eaten. Whytt, who wrote "An Essay on the Virtues of Lime in the Cure of Stone," regarded lime as the essential agent in the remedy of Miss Stephens, and directed lime-water in doses of three or four pints in a day, and published several instances of cures obtained by its use. Hoffman had also recommended lime in his "Observationes et Cautiones Practicæ in Curatione Calculi."—Halle, 1721.

Various acids were recommended by different writers. Bajer recommended the acid of the sorrelli (Epistola ad viros cruditos. Lipsiæ, 1760). Lemon-juice was recommended by Pisanellus (De Esculentis et Potulentis, 1593) and by Tolet (Traité de la Lithotomie, pp. 164, 165). Hartmann advised sulphuric acid largely diluted (De acidi vitriolici virtute calculum pellente, 1778).

For a long time acids and alkalies were recommended by different writers for the solution of calculi, without any proper discrimination. But modern chemistry, by showing

the different conditions of the urine, and the different composition of urinary calculi, has thrown much light upon the effects of acids and alkalis in different kinds of stone. After the investigations of Fourcroy and Vauquelin it was understood that diluted mineral acids were appropriate to the treatment of phosphatic calculi, whose existence implies an alkaline condition of the fluids contained in the bladder; and that alkalis, and especially alkaline carbonates, are adapted to the treatment of uric acid calculi, which occur in connexion with an acid reaction of the urine.

Mascagin suffered severely from uric acid gravel, and occasionally passed small calculi of the same material. He took carbonate of potassa in doses of three drachms a day for ten days, when he was completely relieved. On several subsequent occasions he was threatened with a return of the disease, and was always relieved by the same remedy. He describes his case in the *Mem. della Societa Italiana*, XI. No. 34.

(To be Continued.)

Original Communications.

THE TREATMENT OF ANEURISM,

INVOLVING THE SUBCLAVIAN IN SUCH A PART OF ITS COURSE, THAT A PROXIMAL LIGATURE IS ONLY APPLICABLE WITHIN THE SCALENI.*

By T. T. SABINE, M.D.,

OF NEW YORK.

I. INTRODUCTION.—To the surgeon the subject of the treatment of aneurism has ever been one of interest, and in most cases of gratification, more so than to the physician; for those cases which necessarily fall within the scope of the latter are of such a nature that they neither admit of interference by art, nor, excepting in very rare cases, yield to medical treatment. In most cases, I say, it is a subject of gratification to the surgeon; for, by different means applicable to different cases, he is enabled in the majority to arrest the progress of a disease at once distressing and dangerous. Cases, however, do from time to time present themselves which baffle the skill of the most dexterous. Such cases seem to be on the boundary line, if any there be, between medicine and surgery. We are unwilling to pursue medical treatment alone, for then an almost certain, though more distant death, awaits the patient. On the other hand, if we look at the records of surgery we find that hitherto few have been cured by surgical means, but that death has been much more speedy than it otherwise would have been. The question then resolves itself into this—Shall we leave such cases alone, except adopting such treatment as may relieve the patient of his more urgent symptoms; or shall we, with the present statistics, operate in one way or another, thus giving the patient the chance of a possible cure, or the risk of a much more probable death?

In looking at the first part of this question it is at once seen that it is a course which no one would wish to adopt. Medical treatment, which is somewhat more demonstrative, is so proverbially uncertain, so necessarily slow, and finally so unlikely to effect a cure in the cases to which I particularly refer, in which the aneurism runs a comparatively rapid course, that it should only be adopted provided no other plan of treatment be feasible. The reason of this is, that with our present knowledge we know of no agents, either medicinal or hygienic, which by acting either locally or generally, are at all likely to afford permanent relief. With regard to the second part of the question, as to the propriety of surgical interference, it becomes

necessary to inquire into the causes of failure, and whether these be inevitable and likely always to recur, however the treatment be modified, or whether they be due to the fact that the means hitherto employed have not fully answered the indications. If the first be the case, then medical treatment, with its slender hopes, must be adopted; but if the second, then we must look for and remedy those unfulfilled indications.

Aneurism, involving the subclavian in such a portion of its course that a proximal ligature is only applicable within the scaleni, is one of this class of cases. Up to the present time no operation that merits much consideration has been successful, and the question now is—Shall these operations be abandoned entirely, or can they be modified in such a way that success will be comparatively as certain as when they are resorted to for aneurisms of other arteries? The answer to this will be given under the head of treatment.

TREATMENT.

II. MEDICAL TREATMENT.—Upon this I shall spend no time; it has been tried too often in other aneurisms to permit of any reliance being placed upon it. It was tried in both Partridge's and Liston's as well as in Rogers's case, without success. Velpeau characterizes it as "now generally obsolete, and at war with the more sound pathological and physiological views which should govern the therapeutics of such affections."

III. EXTERNAL APPLICATIONS.—This somewhat irrational treatment has in a few instances proved successful in subclavian aneurism. The following are all the cases I have been able to find:—Pelletan (*Clinique Chirurgicale*, t. i., p. 877), reports a case of aneurism cured by means of ice, conjoined with the balsam treatment. Guerin (Erichsen's "Obs. on Aneurism," p. 472) cured a case in a few months by means of compresses saturated with oxycrat (?). Bonnet (*Med. Times & Gazette*, July, 1853) treated the aneurism with the chloride of zinc, the result being a cure in about three months. It has probably been unsuccessfully tried in other cases which have not been reported. Little (*Med. Times and Gazette*, May, 1857) applied ice for three weeks with no success. This treatment, though applicable perhaps in some cases to aneurism by anastomosis, vascular tumors, etc., can never be adopted in aneurisms which admit of other treatment, for the reason that it is not only a painful and tedious process, but the slough which it would often cause might lead to fatal hæmorrhage. This is especially so in subclavian aneurism, where the hæmorrhage could only be effectually controlled by opening the sac and tying above and below the arterial opening; an operation not only dangerous and difficult, if not impossible, but very unlikely to succeed on account of the closeness of the branches and the diseased state of the vessel.

IV. COMPRESSION.—Compression may be either direct or indirect. The latter is, without question, inapplicable to subclavian aneurism, for there is no part of the artery between the tumor and the heart to which it could be applied. The former is equally inapplicable, though this is not at first sight so manifest. In order that direct compression be effectual, two things are necessary: first, that the compression should be applied over the whole area (not superficies) of the tumor; second, that there should be some structure on the opposite side sufficiently firm to afford counter-pressure. Neither of these conditions, more especially the latter, can be fulfilled in subclavian aneurism. The first could not, unless the aneurism were very small, for otherwise some portions of it would be beyond reach. Neither could the second, for there is nothing but the small surface of the first rib to exert the counter-pressure, and hence the tumor could increase laterally and in a downward direction. The great danger in this treatment would be inflammation and consequent suppuration of the sac, as has happened in other aneurisms treated in this way.

V. GALVANO-PUNCTURE.—This method of treatment has

* An Inaugural Thesis subjected to the examination of the Trustees and Faculty of Medicine of the College of Physicians and Surgeons of the Medical Department of Columbia College, Ed. DELAFIELD, M.D., President, for the degree of Doctor of Medicine, March, 1864, and to which the prize was awarded.

been applied to subclavian aneurism three times; twice unsuccessfully, and once successfully.

By referring to Liston's case of ligature it will be seen that it was tried without the desired result. Schuh also tried it in the case of distal ligature, hereafter to be referred to. Dr. Abeille (*Monthly Jour. Med. Science*, Jan., 1848) tried it in an aneurism involving the left subclavian. The operation was continued for twenty-eight minutes, by which time the tumor had become perfectly solid. Seven months afterwards no trace of the tumor was visible; and at the time of the communication, two and a half years after the operation, the patient was still perfectly well. Though performed but three times in aneurism of the subclavian, it has been tried a number of times in those involving other arteries. Up to 1853 there had been thirty-six cases; of these the results were—in one not mentioned, in twenty-three unsuccessful, and in twelve successful; but of these last all but two were at the same time treated in other ways. In some of the unsuccessful cases sloughing of the sac was the result, and the life of the patient only saved by the application of a ligature. Sloughing occurred in Liston's case, and at the time of death, from other causes, had extended to the sac. The way in which a cure is effected is partly by the local inflammation induced and partly by the formation of clots, due both to the electric current and to the presence of the needles. The local inflammation might surpass the desired limit, and thus cause a fatal result. If, then, this treatment has been so barren of good results in those minor cases to which it has been applied, viz. varicose aneurism at the elbow, etc., we should expect no favorable results from its employment in aneurisms of such magnitude as those of the subclavian.

VI. INJECTION.—MONTEGGIA, in 1813, first proposed this means for the cure of aneurism, since which time it has held a position analogous to that by galvano-puncture, though a treatment more likely to produce unpleasant consequences. Malgaigne* read a paper on this subject before the Academy of Medicine of Paris, which was fully discussed at that time, the result being the condemnation of the practice almost without restriction. He gave eleven cases in which there were four deaths, five cases of serious complications, and two cures; these cures, however, were "obtained at much cost." The principal complication was inflammation, and in some cases suppurating and sloughing of the sac or gangrene of the limb.

In addition to the eleven cases of Malgaigne, I have collected nine others, making twenty in all, which are here tabulated:

OPERATOR.	SEAT OF ANEURISM.	RESULT.
NIEPCE.	Popliteal.	Successful.
SERRES.	Elbow.	"
JOBERT.	"	"
VAILLETTE.	"	"
PAVESI.	Temporal.	"
LUSANNA.	Facial.	"
RAOULT.	Supra-orbital.	"
BOURGUET.	Ophthalmic.	"
ADAMS.	Post-Tibial.	"
VELPEAU.	Elbow.	Unsuccessful.
SOULE.	Femoral.	"
SOULE.	Post-Tibial.	"
ALQUIE.	Ulnar.	"
MALGAIGNE.	Brachial.	"
LENOIR.	Popliteal.	Death.
DUFOUR.	Carotid.	"
JOBERT.	Elbow.	" (gangrene).
UNKNOWN (MALGAIGNE).	"	"
MOTT.	Subclavian.	"
PETREQUIN.	"	" from other causes.

Excluding Petrequin's case, we have nine cases successful, ten cases unsuccessful, and five of these last resulted in

death. In every one of the five simply unsuccessful cases proximal ligature became necessary on account of hæmorrhage. In two of the twenty cases gangrene occurred, and in another it was threatened; in six inflammation supervened; in one the patient died on the table. The only cases I can find in which this treatment has been applied to subclavian aneurism are Petrequin's and Mott's.

PETREQUIN (*Gaz. Hebdom.* t. i., p. 192) applied a ligature to the artery on the distal side of the tumor, and two days after injected the sac with perchloride; the consequence was, the disappearance of all pulsation, but the patient died twelve days after the first operation, from secondary hæmorrhage. Mott injected a subclavian aneurism, the patient dying almost immediately.

By experiments upon the lower animals, and from the experience derived from some of the operations on man, it has been found that the artery must be compressed on the proximal side of the tumor, in order that the injection prove successful. The reason of this is, that the ægout used does not coagulate the blood at once, but takes some seconds to do so, and hence if the circulation were not stopped in a great degree, the effect would not be produced in the tumor but in a distant part of the artery, or even in some other artery. This proximal compression is evidently impossible in the cases to which I refer. The suppuration, which would be not unlikely to ensue, though a serious complication in minor aneurisms, becomes a dangerous, not to say fatal one, in those of the subclavian, and that for reasons already given under the head of galvano-puncture.

This treatment then should, I think, be banished entirely in subclavian aneurism—at any rate with our present knowledge. ERICHSEN characterizes it as "not only coarse and unscientific but dangerous."

VII. MANIPULATION.—In the early part of 1852 Fergusson proposed a new method, which he termed manipulation, for the treatment of aneurisms situated near the trunk. This consisted in forcibly squeezing and manipulating the tumor in such a way that some portion of the fibrous laminæ lining it might be detached and carried into the artery on the distal side of, and just beyond the tumor, and being there arrested on account of its size, cause an obliteration of the artery at that point. The main current of the circulation being thus cut off, he thought that the tumor would become obliterated through the deposition of laminated fibrin. This treatment somewhat resembles that by distal ligature. I find four cases recorded in which this treatment has been adopted in subclavian aneurism.

FERGUSON (*Lancet*, Nov. 15, 1857).—After the manipulation the pulse was arrested in all the arteries below the tumor, and the patient became faint and giddy. In six or seven hours the pulsations returned, and the manipulation was repeated next day. After this the tumor diminished in size and force; but seven months after, "at which date the tumor was much diminished, the patient had a severe feverish attack, accompanied with excruciating pain in the tumor, and died after a few days' illness." On dissection the axillary artery was found plugged, and the tumor had "extended or given way in the direction of the axillary plexus of nerves."

FERGUSON (*Lancet*, Nov. 15, 1857).—The history of this is somewhat the same during the operative period, except that a slight attack of hemiplegia occurred. The tumor disappeared entirely in two years.

LITTLE (*Med. Times and Gazette*, May 23, 1857).—The tumor, situated on the right subclavian, was manipulated in January with no apparent result, but two days after, the brachial and antibrachial pulses became weaker, and in ten days had entirely ceased. The tumor became more solid, and the bruit and pulsation ceased. The arm became greatly wasted and partially paralysed. In November the use of the arm was restored. In March, fourteen months after the operation, the tumor was reduced to the size of a walnut. A small pulse was apparent at the wrist, but none in the brachial or axillary arteries.

HILTON (*Lancet*, June, 1861).—This aneurism was like-

* *Revue Med. Chir. de Paris*, Nov. Dec. 1853, Jan. 1854.

wise seated on the right subclavian. It was treated for four months by the external application of ice, digital compression, etc., but without success. During the last month and a half it was manipulated, the desired result not following. The report of the case terminates here, with a promise of further communication, but I have been unable to find it in any subsequent number.

There are then two successful and two unsuccessful cases.

This treatment has been so recently introduced and so little tried, that we cannot base any very safe conclusions upon the cases reported. In order that it should be successful two things are necessary—1st. That the fibrinous clot be of a particular size, and be arrested in the artery at a particular point; 2d. That no complication arise.

1st. With regard to the size of the clot, it can readily be appreciated that if it be too small it will pass through the axillary and be arrested at some point lower down than desirable, where it will be not only useless as regards the cure of the aneurism, but injurious as predisposing to the development of gangrene. If, on the other hand, it be too large, it will not pass into the artery at all. It is also desirable, if not necessary, that it should be arrested at such a point that the collateral branches be not at the same time obstructed.

2d. The complications to be apprehended are three. 1st. Inflammation of the sac. This is not at all unlikely to happen, owing to the somewhat rough handling to which the tumor must be subjected. 2. Cerebral embolism. Embolism of the axillary is what is aimed at in order to effect a cure; but cerebral embolism is a complication, and a serious one. It is probable that it occurred in both Fergusson's (2d) and Little's cases, especially the former. It is somewhat difficult to understand the mechanism of this, owing to the fact that the current of blood is passing in a direction opposite to that in which the clot would have to pass. It must be remembered, however, that the necessary compression probably stops momentarily the circulation of the blood, and hence might allow the clot to reach the not-very-distant mouth of the vertebral. This is the only explanation I can think of. 3d. Gangrene. This might occur from the sudden closure of the axillary, especially if the clot were arrested near to the point of origin of the principal collateral branches; or it might arise from small clots being first detached and carried down into the brachial or its two divisions, and afterwards a clot being arrested in the axillary. The impairment of nutrition which usually occurs in the limb might favor it. I think, with our present experience of the operation, the conclusion to be arrived at is, that it might be well to try it in some cases before resorting to other more serious operations, such as amputation. All these methods of treatment, however, would necessarily give place to that by proximal ligature, if it should hereafter prove successful.

VIII. AMPUTATION.—Amputation at the shoulder-joint as a means of cure in subclavian aneurism was first proposed by Fergusson. I can find no recorded case of its performance, and therefore all reasoning upon the subject can only be speculative. The amputation itself is quite successful, at least two-thirds of those operated on recovering, and hence in these extreme cases might be resorted to, provided it accomplish the end proposed, and proximal ligature be found unsuccessful. This method aims at the accomplishment of two things: first, distal ligature, thus cutting off the main current of blood through the tumor; and second, the removal of the limb, thus obviating the necessity of the enlargement of those collateral branches arising between the point of ligature and the aneurism, which, by that enlargement, would tend to keep up the circulation through the tumor, and thus counteract in a measure the effect of the distal ligature. The first of these—distal ligature—I shall discuss more particularly hereafter. The question as to whether the two combined will effect a cure must be left unsettled until a sufficient number of operations have been performed upon which reliable conclusions may be based. At present no very great rea-

sons are seen why it should not succeed; although we know that practice often gives a very different result from that which theory would lead us to expect. After amputation the blood circulating through the aneurism would only be that necessary for the supply of the branches of the axillary, and there would be no necessity for enlargement of these, as the limb has been removed. In about 121 out of 263 cases, one or more branches arise from the third portion of the subclavian. Should this happen in an aneurismal artery, it (the branch) would probably be obliterated by pressure, or the covering of its orifice by laminated fibrin, as has been noticed in several cases (Erichsen).

Two questions now present themselves:—1st. Is the blood necessarily circulating through the aneurism after the operation sufficient to prevent its consolidation? 2d. If it is not, is there any other cause which would prevent it? The answer to the first of these cannot safely be given until the operation has been performed. It has been shown by Bellingham and the other Dublin surgeons to whom is due the chief credit for the treatment of aneurism by compression, that those cases are cured most effectually in which the whole circulation is not cut off. If the whole current be cut off, a soft coagulum is apt to form in the tumor; whereas if a small quantity be allowed to circulate, laminated fibrin is gradually deposited in, and obliterates the tumor. Though this may be true in those cases in which the pressure is exercised between the aneurism and the heart, thus cutting off the impulse of blood, it is doubtful if it is in those cases where the compression, or what here amounts to the same thing, the ligature, is applied on the distal side, thus allowing the tumor to be affected by the full distending impulse. This is probably, as will hereafter be seen, one of the causes of the inefficiency of the distal ligature when applied to any artery, and is particularly so in an artery situated so near the heart as is the subclavian. In thus answering the first question I have also answered the second—viz. that the impulse of the blood may be sufficient to prevent a cure.

Though amputation has never been performed for subclavian aneurism, it has been once for popliteal. This is the only case of treatment by this method that I can find recorded. In 1781, Pinchiena of Turin amputated the leg for a popliteal aneurism. This he did only in order to preserve the knee as a means of support for an artificial leg. After the operation the tumor became hard, ceased to pulsate, diminished considerably in volume, and a cure was the result. Opinion respecting this treatment must at present remain "sub judice." Even if successful it could never supersede the treatment by proximal ligature, even if the latter should hereafter prove to be not quite so successful, involving as it (the former) does the loss of an important member. Before concluding this subject it might be well to state that Fergusson has proposed distal ligature first; and then, if that did not succeed in effecting a cure, amputation. Under the next head I think I can show that distal ligature is not only in itself a dangerous operation, but one not likely to effect a cure in subclavian aneurism.

(To be Continued.)

ON

THE ACTION OF BROMIDE OF POTASSIUM IN INDUCING SLEEP.

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AN article on this subject appeared in the *London Lancet* for May 28th, by Dr. H. Behrend, in which cases are given showing the sedative effects of this remedy when given in large doses. Dr. Behrend was induced to use this remedy by the recommendation of Dr. Brown-Séquard. Garrod, in his *Lectures on the New British Pharmacopœia*, also mentions that bromide of potassium, in large doses, induces drowsiness.

I have had several opportunities to try this medicine for

the purpose of inducing sleep, and I will give a few cases in point:

CASE I.—Mrs. H., æt. 40. This lady has been troubled for about ten days with a teasing, irritative pharyngeal cough, much aggravated at night-time, rendering it impossible for her to lie down. The fauces, the palate, and the whole pharynx were highly congested. Topical and general remedies were used for several days, with but partial and temporary relief. Upon the same evening that I first read this paper of Dr. Behrend's, I gave this lady one drachm of the bromide of potassium in one ounce of water at bedtime, inducing her to hold it for some time in the mouth and gargle the throat with it before swallowing it. The remedy had a most happy effect; she slept comfortably till about four o'clock in the morning; she then repeated the same dose, and slept till after ten o'clock. At four P.M. she took one drachm of the bromide in a tumblerful of water, and slept an hour on the sofa. At ten o'clock P.M. another drachm of the bromide was taken, washing the mouth and gargling the throat well before swallowing the solution. She had a comfortable night, free from the irritative cough. In the next fifty-six hours four drachms more of the bromide were taken, making eight drachms in seventy-two hours. She had no headache or other unpleasant symptoms; the bowels were free; the urine secreted in large quantity; the irritation of the pharynx had entirely subsided.

CASE II.—A young lady, æt. 18, was attacked during the night with rigors, followed by tumultuous action of the heart and palpitations. When I first saw her in the morning she had general febrile symptoms, but her greatest complaint was of an intense, burning, pungent heat and pain, almost circumscribed between the seventh and ninth ribs, and extending up over the pectoralis major, and over the whole of the left breast. The clothes were all loose upon her, as she said she could not bear them to press against her on the left side, nor could she lie for a minute upon that side; the left mamma was swollen, the nipple erectile, reddened, and tender. Late in the afternoon vivid, red patches had made their appearance between the seventh and eighth ribs, being first noticed near the spine, and each one becoming developed by precursory lancinating pains. The breast was also entirely circumscribed by three distinct vivid patches, the first one appearing about two inches below the nipple, and the others appearing consecutively, circumscribing the breast and meeting the line of the same distinct patches that was at the same time forming between the ribs. I had an opportunity to witness the invasion of this acute attack of *herpes zoster*, for such it proved to be, induced no doubt by sleeping during a warm night with the windows open, and with but one garment upon her. She passed a restless and sleepless night, and was unusually nervous and irritable during the next day. At bedtime I gave her a drachm of bromide of potassium in a tumblerful of water; it relieved the nervous irritability, the itching, burning heat of the herpetic eruption, but she did not sleep. At one o'clock A.M. I repeated the dose of one drachm of the bromide. In half an hour she was asleep, and slept comfortably until nearly eleven o'clock the next morning, awaking very much refreshed and relieved. Half-drachm doses of the bromide were given every four hours, if awake, during the next three days, when it was discontinued, as no medicinal treatment was needed. The disease progressed favorably; desquamation took place on the sixth day.

CASE III.—A low, vulgar servant-woman had left her place of service and gone on a spree, which she had continued until she was brought up by an attack of delirium tremens. She had been treated for four days before I saw her with opium in large doses, without inducing sleep. The pupils of the eyes were intensely contracted from the effects of the opium. I gave a drachm of bromide of potassium; it did not induce sleep, but relieved the intense itching of the face caused by the opium. In three hours I repeated the drachm of bromide; it had the effect of quieting her, and she lay passively upon the bed, but she

did not sleep. They told me she had not passed any water for three days. I did not like to repeat the bromide if this was the case, fearing that I might produce congestion of the kidneys. She endeavored to urinate, but could pass none. I used the catheter, and removed, I should think, nearly two quarts of urine. I immediately gave another drachm of the bromide, and within an hour she was fast asleep, from which, after eight hours, she was aroused with great difficulty. The pupils of the eyes were still much contracted, and a great part of the opium was undoubtedly yet in the system.

I have presented these three cases, showing the action of bromide of potassium in acute diseases; I could present other cases showing its action in sub-acute or chronic disorders, but such cases would much resemble those already described by Dr. Behrend.

One important question arises in the administration of these large doses—Is there no fear of producing congestion of the kidneys? We know that there is danger of this result with nearly all soluble saline substances when administered in large doses, especially large doses frequently repeated. Tully's numerous cases of the administration of chlorate of potash in large doses are instances in point. The death of Dr. Fountain, by a large dose of the same medicine, is still more apropos. I have seen many instances of death (while experimenting upon animals) from congestion of the kidneys, where, without post-mortem examination, death might be attributed to other causes; and I have thus learned to watch most carefully the secretion of urine while administering medicines that are readily absorbed and are chiefly carried off by renal secretion. Dr. Behrend says: "Dr. Brown-Séguard has informed me that he has given it with perfect safety for several successive weeks in drachm doses." I have not administered it so frequently or so persistently as this; but I have seen two instances in which I had to discontinue the medicine, owing to its irritative action on the kidneys. In both of these instances it had but little sedative action.

What is its *modus operandi*? I confess to a certain extent to have used this remedy experimentally, but having most excellent authority for doing so; for whatever Dr. Brown-Séguard "has used with perfect safety and success for several weeks," and has recommended to his friends, cannot, I know, be attended with much danger if administered by skilful hands. From the small experience that I have had with bromide of potassium in large doses, it seems to me to be eliminative in its general action, but to act specially as a nervous sedative. Further researches and experiments upon animals are necessary to determine its exact *modus operandi*.

45 WEST 35TH STREET, NEW YORK.

A SINGULAR CASE OF FATAL INJURY.

By C. S. WOOD, M.D.,

SURGEON U. S. A.

CHARLES N. WALLACE, Irish, æt. 32, enjoying good health, married, an orderly of General Wright, was found on the morning of June 16th, 1864, lying in a state of unconsciousness near the stable door with the horse, which he evidently was about mounting, standing near saddled and bridled, with the halter tied around his neck. How long he had lain in this condition it was impossible to say. He was at once taken to his residence near by, where I was summoned, when I found the skull laid bare over the right temporal region to the extent of two inches, accompanied with fracture of the bones (stellated); no evident depression. He was, although unconscious, very restless, tossing himself about from one side of the bed to the other, rising up and constantly changing his position, which, with a feeble pulse, short breathing, paleness of the surface, coldness of the extremities, cold clammy perspiration, &c., led me to believe he had sustained more serious internal injuries; and on further examination, found evidence of the horse having stepped on him in the right groin, just above

the pubes and directly over the track of the femoral vessels. The tissues of the whole thigh, extending to the knee, were nearly double the size of the opposite, and infiltrated with blood. This infiltration extended to the scrotum, and up the abdomen nearly to the umbilicus. A bloodvessel was ruptured and he was dying from hæmorrhage; but what could be done? It was impossible to say what vessel was ruptured, or at what point; besides, he had already lost sufficient blood to prove fatal. The friends were apprised of the result which soon occurred, as he continued to become more and more restless, the pulse ceasing at the wrist, the extremities becoming cold, and died just at night, without in the least degree regaining his consciousness. From the nature of the injuries it appeared he must, in endeavoring to mount the horse, have fallen, when the animal turned and trod on him at both points of injury.

Autopsy twenty hours after death, assisted by Drs. Harkness and Nixon of Sacramento, California.—On making a triangular incision from the umbilicus to a position each side, midway between the superior anterior spinous process of the ilium and the pubes, and turning down the integuments, large quantities of coagula liberated themselves, besides being so infiltrated with blood as to increase their thickness to more than double their ordinary dimensions. On extending the incision down the left thigh, the same conditions presented themselves, liberating from this region more than two quarts of coagula. On carefully tracing up the femoral artery, a rupture was found of its entire coats large enough to admit the end of the finger, almost directly beneath Poupart's ligament, which fully explained the cause of death. The scrotum and pelvic cavity were also filled with blood, extending up over the peritoneum, but not within it. No injury of the intestines or bladder.

The case, to me, is somewhat of an anomaly, as the artery, heretofore sound and in a healthy condition, was completely ruptured without destroying the integrity of the superincumbent tissues.

SACRAMENTO, CAL., June 20th, 1864.

VOIDING OF AN ANIMAL BY THE BLADDER.

By A. W. TUPPER, M.D.,

OF NORTH GRANVILLE, N. Y.

JUNE 9th, 186—, I was called to see Mrs. L—, 69 years of age. She had been out of health for a long time, and had been under the care of another physician. When I saw her she complained very much of a difficulty in voiding urine. She said she should feel very well if she could be relieved in this respect. Her case struck me at once as being somewhat peculiar—unlike anything I had ever met with. She said it was not a scalding sensation after urinating, but a severe *stinging* pain, which completely overcame her. Such was its effect upon her that she was obliged to go to bed, and it would be an hour, and sometimes longer, before she would get over it. Thinking it might be an ulcerated state of the mucous membrane of the neck of the bladder, I prescribed the usual remedies in such cases, but with no effect. The urine was of a natural appearance, neither too high-colored nor sedimentous. I resorted first to one remedy, then another and another, but failed to afford my patient any relief. After suffering in this way for several weeks and becoming impatient, she thought she would resort to a remedy she had heard recommended by some of her friends. Accordingly she steeped an herb called "knot-grass," which grows in almost every door-yard, drank freely of a strong decoction, and went to bed, having suffered more than usual this day. During the night she arose and made water very freely and with perfect ease. In the morning, to her astonishment, she found in the vessel in which she had urinated an *animal* about ten inches long and about the size of a large knitting-needle. It had every motion of the snake. It would move rapidly in water with head erect, resembling very much a snake in running. It was very lively when she first discovered it, and lived in water five or six days. I think it would have lived longer

had it not been left exposed to the rays of a warm afternoon sun. Examined with the microscope, the head appeared very blunt, very much as though it had been cut off. It had a dark ring around it for an eighth of an inch from the end. My glass was not strong enough to discover any eyes. The tail was divided into three parts for three eighths of an inch from its extremity. It was a little larger in the middle than at either end; was of a dark-brown color. She said she knew the vessel was clean when she went to bed. She had no evacuation of the bowels at the time she got up to make water. Queries.—How did this animal get into the vessel? Where did it come from? To what genus does it belong? It is proper also to state that she has had no return of that distressing sensation which she said was indescribable, and of a peculiar lancinating character. If this animal came from the bladder, did it generate there? If it did not come from the bladder, how can we account for the instant and perfect relief afforded at the time, and an entire absence of all the symptoms since its occurrence? If it be a production within the bladder, I know of nothing on record of a similar character. Others may have met with such strange phenomena in their practice, but to me it is *something new*. The facts are as I have stated them; I leave others to draw their own conclusions.

PHYSIOLOGICAL ACTION OF HYDRARGYRUM AMMONIATUM.

By EDWIN NESBIT CHAPMAN, A.M., M.D.,

Prof. of Obstetrics, etc., etc., in the Long Island College Hospital, Brooklyn, N. Y.

MRS. G., affected with scirrhus of the uterus, which had greatly reduced her system, both by hæmorrhage and the presence of cancerous elements in her blood,—and an active, vigorous woman, her nurse, who stated that she was never ill in her life, took together, in lieu of calcined magnesia, a heaped teaspoonful of ammoniated mercury. This, with other medicines, was stored away in a closet, having been procured originally for the destruction of vermin. The nurse, stirring the medicine in half a glass of water, gave it to the lady; and then, according to her wont, to take a portion of every dose given to her patients, drank the remainder herself, carefully rinsing out the dregs. Consequently, from the insolubility of this preparation, the largest portion fell to her share. Almost immediately active and violent vomiting, attended with a profound nausea similar to that from tartar emetic, set in; and then, directly, the bowels began to act freely and copiously. These symptoms continuing for twelve hours, produced the weakness and debility necessarily attending profuse evacuations; but otherwise there were no special effects—no burning, irritation, or tenderness at the epigastrium, nor other evidence of any kind showing the ingestion and passage through the intestines of a corrosive poison. On the contrary, the grade of action set up resembled the emeto-cathartic operation of a large and combined dose of tartar emetic and calomel; and in one of the cases, where the passages were observed, they were very dark and bilious. On the third day all unpleasant feelings had disappeared, and neither salivation nor other ill result followed.

Therapeutical and toxicological writers, from the few cases recorded in which the white precipitate has been administered with criminal intent, have come to the conclusion that it is an irritant poison similar to corrosive sublimate, though perhaps somewhat less active and energetic; but, if we may form a judgment from our observations in these two cases, we would say its mode of action rather resembled that of calomel, and that it possessed no poisonous properties whatsoever.

I would mention, in addition, that the Messrs. Heydenreichs, chemists of the hospital, examined a portion of the powder remaining, and found it to be ammoniated mercury; and also that a heaped teaspoonful of this drug weighs about two and a half drachms.

Reports of Hospitals.

U. S. GENERAL HOSPITAL, CENTRAL PARK, N. Y.

Surgeon B. A. CLEMENTS U.S.A., In Charge.

WOUND OF RECTUM—ARTIFICIAL ANUS—DIPHTHERIA—DEATH.

SERVICE OF DR. GEO. F. SHRADY.

EDWARD R. HARRINGTON, æt. 23, Sergt., Co. H, 15th Mass. Vols., was admitted into the Central Park Hospital, June 19, 1864, with a gunshot wound of the rectum, which he had received at the battle of Coal Harbor, June 3, 1864. The missile, which was evidently a minié ball, entered his right buttock an inch and a half above and posterior to the trochanter major, traversed the pelvis, and taking a course slightly downwards and backwards, emerged in nearly a corresponding situation on the left side.

The wounds were healthy in appearance, but through both of them was discharged fecal matter. For two weeks after his admission he had only two passages per anum, and these were very small in quantity. During all this time, too, having a passage once a day, he discharged the feces through both the openings, but mostly through the wound on the left side. In the course of the third week the discharge through the right wound ceased, and the opening commenced to close up from the bottom.

His health in the meantime continued steadily to improve, and a very favorable prognosis of his case was given to his friends. The wound upon the left side discharged a laudable pus, and gave every indication of following the good example of its fellow. For a long time afterwards, at least a month, feces were discharged, mostly through this wound, and only occasionally per anum. Finally the discharge of feces from the wound gradually ceased altogether, and the whole passed by the natural passage. He, however, seemed unable to obtain a stool except by the use of an enema, and it was noticed at this time that some of the injection, tinged with stercoraceous matter, would escape by the wound, but nothing more. It was evident, then, that the opening in the gut was gradually being closed. The wound still continued to look well, and the patient kept up a good courage and enjoyed a good appetite. Everything looked promising until the afternoon of the twenty-eighth of July, when he began to complain of symptoms of diphtheria, and in twenty-four hours sank therefrom and died.

On post-mortem examination, besides the existence of diphtheria, which was the immediate cause of his death, there was sub-acute pericarditis to the extent of distending the pericardium to its utmost capacity. There was a small quantity of recent flaky lymph attached to the lower free margin of the right lung, but that organ, as well as its fellow, was found healthy; kidneys were not examined.

The abdomen being opened, and the small intestines removed, a careful search was made for the wound in the rectum. Passing the hand down along the hollow of the sacrum, adhesions were found to exist between it and the posterior surface of the gut, about six inches below the promontory of the sacrum. These adhesions were carefully broken down, when an opening sufficiently large to admit the end of the little finger was discovered on the posterior surface of the rectum, and which communicated, by means of a fistulous tract, with the external wound. There was a copious deposit of fibrinous tissue in the neighborhood, and there is no doubt but that the whole would have healed up in a short time. The track of the wound from the point of entrance of the ball to the gut was entirely healed.

The missile traversed the pelvis from right to left, from one sciatic notch to another, and between the centre of the sacrum behind and rectum in front. There was no escape of feces into the pelvic or peritoneal cavities. The rectum above the wound was much contracted, and below it was much distended with ropy, hardened feces. This impacted condition of the gut was evidently due to the fact that

the patient, on account of his weakened condition for the thirty-six hours which preceded his death, had no passage from his bowels, it not being thought expedient at that time to administer the usual enema.

There is no doubt but that this case, but for the accident of diphtheria, would have been a successful one; as there was every indication, not only by symptoms during life but by the evidences of post-mortem examination, of a disposition on the part of nature to close the wound.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, February 10, 1864.

DR. A. JACOBI, PRESIDENT, IN THE CHAIR.

SEMINAL CYST.

DR. VOSS presented a vial containing a semi-transparent bluish fluid which he had removed from an oval-shaped tumor the size of a goose-egg, situated above the testicle. The patient was a seafaring man, and dated the appearance of the tumor from the month of October of last year. It increased in size very slowly until the month of December, when he received a blow which caused the swelling to grow more rapidly. It then also became painful, especially after exertion, and the patient's health began to suffer. The tumor, on examination, was distinctly fluctuating and transparent, and its walls were very much thinner than in the case of common hydrocele. The trocar was introduced and about four ounces of fluid escaped, which, on being examined by the microscope, was found to contain spermatozoa. The operation was performed at half-past ten that morning, and the spermatozoa were found to be in motion at two P.M., when the specimen was examined microscopically. After the fluid was withdrawn the cyst was injected with iodine.

DR. VOSS, in alluding to the pathology of the subject, stated that it was not as yet settled what was the cause of such pathological formations, the statements of Paget, Rokitsansky, Luschka, and others, not being corroborated by the results of post-mortem examinations.

DR. KRACKOWIZER believed that Luschka had determined by dissection that the seminal cyst was nothing more than the Morgagnian body, which had very much enlarged, and between which could be traced a connexion with the seminal ducts of the epididymis.

DR. VOSS remarked that the body referred to was only a remnant of foetal life. He further stated that Giralde's discovered a body which he called the corpus innominate. This was supposed to be the origin of the seminal cysts by some writers, while others maintain that, like the Morgagnian body, it is nothing but a foetal organ.

CYSTIC DEGENERATION OF OVARY—OVARIOCTOMY.

DR. KRACKOWIZER exhibited a specimen of cystic degeneration of the right ovary which he removed a week before by the operation of ovariotomy. He remarked as follows upon the case: The patient was thirty-five years of age, and had always enjoyed good health; she first menstruated when she was sixteen years old, and was married twelve years ago. She had been pregnant six times, and had always been delivered at the regular time. The first notice which she took of the commencement of this tumor was a few months after the delivery of her third child, on the 25th of November, 1855. She had one menstruation four months after. When the infant was six months old it was weaned, and then the patient noticed a painless movable tumor, the size of her fist, in her hypogastrium. The fourth child was born thirteen months after the third; after the delivery of this child it was found that the tumor had increased in size. This fourth child died when five weeks old from marasmus. The menstruation reappeared eight

weeks after delivery, but she became pregnant shortly afterwards. The fifth child was born twelve and a half months after the fourth, and is still living; she nursed this child for eighteen months. Her monthly periods reappeared when this child was twelve months old. During the time she was nursing this child she became stouter and stouter, the result of the accumulation of fluid, and for this she was tapped in 1859. She was seen during November, 1860, by Dr. Kudlich, of Jersey City, who at once recognised the disease, and told her that she could only get entirely rid of it by ovariectomy, and that the longer she waited for the operation to be performed, the more difficulties would lie in her way towards recovery. The patient was rather inclined to submit to the operation, but the husband strongly objected to it; so the doctor was forced to resort to the merely palliative measure of tapping. She was of course relieved, and Dr. Kudlich then found that there was only a roundish substance to be felt at the bottom of the abdominal cavity about as large as the two fists. She was tapped again during December, 1861. I saw her with Dr. Kudlich on the 27th September, 1862, with the view of deciding whether it was a case for a radical operation or not, the husband then having no objections to urge against it. The woman was of short stature; she measured forty-three inches around her abdomen at its largest circumference, and the distance from the xiphoid cartilage to the symphysis pubis was twenty-four inches; the umbilicus was on a level with the anterior superior spine of the ilium, and the lowest convexity of the protruding abdomen was on a border with the plane of junction of the upper and middle thirds of the thigh. On examination it seemed probable that she was then six weeks pregnant, and she was accordingly told that nothing could be done until a delivery, which would probably be premature, had taken place. On December 23d I was called again to see her, when she was suffering a good deal from difficulty of breathing, and on measuring her abdomen it was found to have increased eight inches in circumference, while the distance to the symphysis pubis was four inches greater than at the last examination. With a view of affording her transient relief, I tapped her and removed not quite two pailfuls of thick amber-colored liquid. She was very much exhausted after the operation, and the lower portion of her abdomen seemed to be occupied by a mass of nodules about as large as a child's head, but it was difficult to decide how much this was owing to the pregnancy, and how much to the tumor. I did not hear anything of the patient until a few weeks ago, when I found that she had been delivered of a child. She had to be tapped six days after delivery, the abdominal protuberance not having ceased as sensibly as was expected. She said that after the last tapping she could feel a substance as large as the head, and from that time until three or four weeks ago she had increased to not quite the size in which I had found her a year ago. I made a careful examination, and found that the abdominal cavity was occupied mainly by one cyst. On examination per vaginam it was found that the os was very high up. She came to the city from Hoboken, and kept quiet for about eight days to get into the best condition for the operation; the secretion of milk had ceased, and her menstruation had not come on.

The operation was performed in the usual manner. An incision was made a few inches below the umbilicus, and was enlarged sufficiently to admit the hand. On introducing the hand through the opening thus made in the linea alba, it encountered numerous but very slight adhesions anteriorly and laterally. They offered no resistance to the sweep of the hand between the abdominal walls and the cyst. But there was a spot, about six inches in diameter, of which the umbilicus formed the centre, where the adhesions proved very firm. A very cautious attempt to sever them by the hand, on the left side of the umbilicus, broke the cyst wall, and allowed the contents of the cyst—a viscid, amber-colored liquid to escape. Fortunately, some

slight adhesions, more distant laterally from the rent of the cyst wall, and the atmospheric pressure sealing the abdominal walls hermetically on the surface of the cyst, obliged the liquid to take its direction through the abdominal wound, and prevented its course in the pelvic cavity. A very wide trocar was now thrust in the cyst in the median line, giving the contents of the cyst a more direct issue. But finding that thus the emptying of the cyst was too slow a process, after a couple of minutes it was withdrawn, and a large incision made, through which the contents were voided in a very short time. The edges of the wound in the cyst wall, and with them the large empty bag, were now drawn out through the abdominal wound, revealing the fact that the large—now empty—cyst had for its base a tumor about the size of the head of a child two years old, somewhat ovoid in shape, which by some lever motions was brought out through the abdominal wound. This mass, a conglomeration of a multitude of cysts, larger and smaller—in fact, the degenerated right ovary—was connected by a long, flat pedicle, consisting of the stretched ala vespertilionis and the Fallopian tube, with the broad ligament of the uterus. The connexions of the whole mass with the abdominal cavity now consisted of the pedicle just mentioned, and the firm adhesions previously alluded to. The pedicle was now tied firmly with a strong silk ligature, and cut at the base of the tumor; another long, narrow, and seemingly vascular adhesion between the base of the tumor and the posterior aspect of the broad ligament, was likewise tied before cutting it; and I set myself at work to undo the adhesion between the cyst wall and the abdominal wall in the region of the umbilicus. While an assistant everted the abdominal wall and held it firmly, I myself took the cyst wall by a good grasp of the hand, and commenced the tedious work of severing the connexion by preparation with the knife. A very short progress made it evident that there was, properly speaking, no adhesion whatever of the cyst wall to the peritoneal surface, but that all these structures had been obliterated by a complete fusion of the cyst wall, peritoneum, and fascia transversa, in a hard, lardaceous layer from one to two lines and more in thickness. To make an artificial division of this layer in two would have prolonged the operation to a dangerous extent of time; and if accomplished would have left, instead of a peritoneal lining, a wounded, hard, cicatricial tissue, unfit for healthy reparative action and prone to become the starting point of an inflammation of the worst character. Two other plans presented themselves now—either to resect the cyst wall at the edge of the fusion, and to leave as the continuation of the peritoneal lining a portion of the inner surface of the cyst in the abdominal cavity; or to excise the whole fused mass, leaving it adherent to the cyst to be removed, and leaving the two recti, bared of their posterior sheath, exposed. The latter course, as the least dangerous one, was adopted; and how well judged it was, became apparent at the post-mortem, revealing that the inflammation of the muscular surface was hardly worth mentioning, while the adjacent parts of the peritoneum were highly vascular and covered with coagulated lymph.

None of the contents of the cyst had escaped in the abdominal cavity; and after the blood, of which there was very little, had been sponged out, and a few incipient cysts of the left ovary split, and their contents sponged away, the wound was closed in the usual manner by silver wire sutures, and the pedicle was brought in the lower angle of the wound; and to prevent its slipping back, both sides were fixed to the abdominal walls by two extra silver sutures. The patient came out from under the influence of chloroform very well, and it was thought best to give opium when symptoms of peritonitis declared themselves. Having some pain, about eight P.M., six hours after the operation, twenty-five drops of Squibb's Liquor Opii Compositus were given. One or two such doses were given in the course of the night, and subsequently three or four drops every three or four hours. There were then no active symptoms of inflammation, no vomiting, and when the

woman was lying quiet she had no pain. The next evening, about twenty-six hours after the operation, on slightly touching both the lateral surfaces of the abdomen, she complained of very acute pain, even through a thick layer of cotton. Her pulse was 120, and the mild opium treatment was continued, and that kept her comfortable for the next night. On the commencement of the third day, or towards the close of the second, she became more restless and more feeble, and the abdomen swelled more. It was then evident that she was sinking. She died sixty-three hours after the operation.

The autopsy was made twenty-four hours after death. On opening the abdominal cavity, it was found that there had been no attempt at union of the peritoneal wound, and that the cavity was divided into two portions; the upper containing portions of the small intestine, the transverse colon, liver, and spleen. In this upper portion, although the intestines were immensely distended, there was hardly any injection. The lower portion was occupied by omentum adhering to the posterior aspect of the abdominal walls, as well as a part of the small intestines, which in their turn had been glued together by effused lymph. In this cavity there was a moderate amount of purulent effusion; and the surfaces of the uterus, broad ligaments, and bladder were lined with a copious deposit of lymph. I removed the body of the uterus with the left ovary attached. The cyst itself is very large inside, and shows different conditions, being of a rough surface, and on different parts of this roughened surface granulations spring up of different sizes, shapes, and colors; some are very small, like hempseed, and some are larger, having more or less of a papillary appearance. This large cyst is made up of an accumulation of smaller cysts which form the basis of the tumor.

In conclusion, Dr. Krackowizer remarked that the specimen illustrated the falsity of the generally entertained opinion, that frequentappings result in damaging adhesions, inasmuch as all theappings were made below the umbilicus, while the adhesion or fusion of tissues referred to in the history of the case was situated above the navel.

OSSEOUS DEPOSIT IN INTERIOR OF EYE.

DR. LITTLE presented a specimen of osseous deposit in the interior of the eye, which, together with the organ, he had removed from a man sixty years of age. Twenty years ago the patient received an injury which resulted in complete destruction of the eye, and he suffered no inconvenience from the presence of the stump, as far as the opposite eye was concerned, until two months ago. The sight of the sound eye then became so much affected that he was soon totally blind. The stump was removed, but on attempting to cut off the optic nerve, the instrument entered the sclerotic coat, when a small, irregularly shaped osseous deposit was found lying loose in the socket. The osseous deposit was probably due to degeneration of the choroid. The patient has now recovered his sight entirely.

The society then adjourned.

THE registration of births, marriages, and deaths in Vermont for the year 1861, has just appeared, the publication being delayed by an omission of the usual appropriation. The births were 6567, the deaths 4038, the marriages 2188, and the divorces 66. More than twenty per cent. of the deaths were from consumption, and nearly twelve per cent. from diphtheria. The percentage of deaths was 1.31 of the entire population, a little more than the average. By a comparison of the registrations for the last five years with the census of 1860, it appears that while the State has increased its population 13,699, by the ascertained excess of births over deaths, it has lost by emigration 13,210, leaving only the small number of 489 as the net gain in five years. This loss by emigration is not apportioned uniformly among the population, with respect to age or condition, but is limited almost entirely to those in youth or middle life.—*Bost. Jour.*

American Medical Times.

SATURDAY, AUGUST 13, 1864.

REPORT ON CHLOROFORM.

ABOUT two years ago the Royal Medical and Chirurgical Society of London appointed a Committee to inquire into the various points relating to the uses and administration of chloroform. The Committee was composed of the leading surgeons and physicians of London, and the results of their investigation are to have great weight. We cannot better present the substance of this report than in the following abstract condensed from a London contemporary:—

Among the topics embraced in the Report were the following: How chloroform destroys animal life; Effects of chloroform on the heart's action, and on the respiration; Effects of division of the pneumogastric nerve; Effects of chloroform on the glottis and fauces; Effects of ether; *Post-mortem* examination of animals destroyed by chloroform; resuscitation in apparent death from chloroform; Rules to be observed in cases of threatened death from chloroform; Uses of chloroform in surgery, and in obstetric practice and the diseases of women and children, etc.

In investigating the manner in which chloroform destroys life, the Committee had made a number of experiments, chiefly on dogs. Mr. Clover's apparatus was used for the administration of air impregnated with from 1 to 14 per cent. of chloroform; and, for mixtures of air and chloroform containing 40 per cent. or more of the latter agent, an apparatus was employed which allowed heat to be applied. The duration of animal life was found to be in an inverse ratio to the strength of the chloroform. A mixture containing from 1 to 2 per cent. was generally safe. When the strongest doses of chloroform were given, the pulse and respiration ceased almost simultaneously; while the action of the heart continued somewhat longer. When the chloroform was inhaled in full doses through an aperture in the glottis, death was more rapidly induced, and the heart's action ceased before the pulse; while the results of the administration of small or moderate quantities in this way differed little from those obtained by ordinary inhalation.

Observations with the hæmadynamometer showed that the administration of chloroform was first attended with an increase of the heart's action, which was observed even when there was but slight struggling on the part of the animal. This increased action, however, seldom continued above a fraction of a minute; after this, there was a gradual diminution, which, however, was liable to interruptions. The arrests in the fall of the heart's action appeared to correspond with the periods when respiration was lowered, and were therefore believed to be connected with a diminution in the quantity of the poison imbibed; they were also modified by the introduction and withdrawal of air. In several instances, movements of the heart were observed, after the cessation of the rhythmic action of the organ. The duration of the rhythmic action of the heart was longest in cases where the strongest doses of chloroform had been used; and this was explained by supposing that, in such instances, the cessation of movements denot-

ing life is more rapid, while the heart is more gradually and thoroughly enfeebled by the prolonged administration of smaller quantities.

With regard to respiration, it was observed that the concentrated vapor of chloroform produced spasm of the fauces and glottis, but only for a few seconds. After this, and when moderate doses were given, the respiration was increased in quickness for a time. The inspirations were at first deep; but subsequently became more and more shallow and less frequent, until arrest took place. Recovery could be produced in from twenty to forty seconds, if the chloroform were withdrawn; and this could be repeated two or three times. The explanation of the recovery offered was, that the entrance of the chloroform into the lungs was interrupted by the arrest of respiration, while at the same time that which had already been introduced was eliminated. The effects of ether were found to differ from those of chloroform in several respects. This agent exerted on the heart a stimulating effect, less sudden and more prolonged than that of chloroform; and, during insensibility, the pressure of the column of blood in the hæmadynamometer was maintained up to the period of death, and until respiration had ceased; while its failure under chloroform occurred at an earlier period.

The Committee had made observations with the object of ascertaining the best means of avoiding accidents in the use of chloroform, to the agent employed, and to the method of administering it. A mixture containing from 2 to 4 per cent. of chloroform vapor and 96 or 98 per cent of air might be inhaled without danger to life; and, if necessary, 4 or 5 per cent of chloroform vapor might safely be used; but 10 per cent. was liable to produce dangerous symptoms. Ether to a certain extent fulfilled the conditions required; but the slowness of its action and its disagreeable odor were objections to its employment. In the absence of any other known anæsthetic agent capable of fulfilling the indications required, of efficacy and prompt action combined with safety, the Committee had made experiments with certain combinations of chloroform and ether; viz. *a*, a mixture proposed several years ago by Dr. Harley, containing 3 parts of ether, 2 of chloroform, and 1 of alcohol; *b*, one containing 4 parts of ether and 1 of chloroform; *c*, a mixture of 2 parts of ether and 1 of chloroform. The mixture *b* was found to be very similar in its effects to ether; air containing 15 per cent. of it might be inhaled with safety, but its action was very slow. The mixtures *a* and *c* were very similar in action, and were in this respect intermediate between ether and chloroform. In the human subject, insensibility could be produced by them with sufficient rapidity; and in animals could be maintained thirty or forty minutes without destroying life.

The effects of chloroform, the Committee had been led to conclude, depend much more on the degree of concentration of the agent than on the mode of administering it. In the absence of any means of determining the quantity of chloroform vapor, the Committee thought the plan of administering chloroform on a handkerchief or lint least liable to objection. It should be held an inch and a half from the mouth, so as to freely admit air.

In regard to resuscitation after apparent death, the result of the inquiries of the Committee was, that artificial respiration by Dr. Silvester's method, *applied early*, was the most efficacious and easy plan. The cold douche on the face and chest was very inferior. Electro-galvanism and

electro-magnetism were in many instances very effectual; but they were not to be preferred in desperate cases, and were not equal to artificial respiration. Indeed, the Committee held that artificial respiration should never be delayed in order that other means might be tried; it should be employed instantly, when alarming symptoms set in.

The Committee were of opinion, that chloroform ought never to be administered by careless or inexperienced persons. It should not be administered immediately after food, but three or four hours afterwards; and, in cases of much depression, a little brandy might be first given to the patient. The recumbent position was preferred; in the sitting posture, there is danger of syncope. The chloroform should be given slowly, and sudden increase should be avoided as being dangerous. The person administering it should carefully watch the respiration, and keep one of his hands free, so as to be able to examine the pulse from time to time. When pallor, failure of the pulse, or other dangerous symptoms appear, the chloroform must be withdrawn, and free access of air allowed; the tongue should be drawn forward, and the mouth and fauces cleared; the patient must be kept in the recumbent posture, and cold water should be dashed on his face, and the thorax compressed so as to favor respiration. In more severe cases, artificial respiration must be employed at once. The period within which resuscitation is possible varies from two to ten minutes.

In surgical practice, the administration of chloroform, in the opinion of the Committee, is not contra-indicated by the presence of heart-disease; but fatty degeneration of the organ requires care. Chloroform may be given, with proper management, in operations on the mouth and throat. In operations on the deeper parts of the eye, it is undesirable, from the vomiting which may be induced. In hernia, it is highly valuable; and in operations about the anus it is indispensable. The examination of the results of 2586 capital operations performed before chloroform inhalation was introduced, and of 1860 operations of similar character performed subsequently, proved that the rate of mortality had not been increased since the introduction of chloroform.

In obstetric practice, the use of chloroform in natural labor is not attended with danger; no well authenticated cases of death from its use having come to the knowledge of the Committee, although sometimes unfavorable symptoms have been produced. It may, in moderate doses, protract labor; but does not always do so. It does not predispose to convulsion, nor does it interfere with lactation or with the general condition of the mother and child. In artificial labor, the inhalation of chloroform is very useful in many cases; but as a rule, should not be employed when there has been much hæmorrhage, unless stimulants be also given. Chloroform is also useful as a means of facilitating diagnosis in diseases of women; and, both inhaled and applied as a liniment, in severe cases of dysmenorrhœa, neuralgia, etc. Chloroform inhalation was also favorably reported on as a remedy in the convulsive diseases of women and children.

THE BRITISH MEDICAL ASSOCIATION.

THIS Association is about to hold its annual meeting, and the following is its announcement:—"The Thirty-Second Annual Meeting will be held at Cambridge, on Wednesday, Thursday, and Friday, the 3d, 4th, and 5th days of August; President, G. E. PAGER, M.D. An Address in Medicine

will be delivered by E. L. ORMEROD, M.D., and an Address in Surgery by G. M. HUMPHREY, M.D., F.R.S. Papers have also been promised by Mr. SPENCER WELLS, Dr. T. H. BARKER, Dr. B. W. RICHARDSON, Dr. S. MARTYN, Dr. CHRISTISON, Dr. ROUTH, Mr. ERASMUS WILSON, etc. A Report from a Committee appointed to consider the desirability of establishing a Provident Fund in connexion with the Association will be read. On Wednesday Evening, at nine o'clock, there will be a *Conversazione*, by invitation, in Gonville and Caius College; and on Thursday in Downing College. On Thursday, at 3 P.M., there will be full Choral Service in the Chapel of King's College. On Friday, at 6.45 P.M., the members and their friends will dine together in the Hall of Gonville and Caius College. Tickets £1 1s. each." Last year Mr. PAGET, of London, gave the Address in Surgery, and the papers were of the highest order. May not the American Medical Association take a lesson from its sister society, and in like manner secure in advance the preparation of papers by the ablest writers in the profession?

Correspondence.

CASE OF SPOTTED FEVER.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR—As much interest is felt in all that relates to Spotted Fever, I send you the following notes, though imperfect, of a case lately under my care:—I was called May 6th, 1864, to J. L. M——, male, æt. 18 years; found him suffering from intense headache; rigors; eyes suffused, and somewhat swollen; pulse rapid and rather full; not inclined to converse, although if spoken to he would answer in the shortest possible way. I found upon inquiry that for a day or two he had been drooping, and unable to attend to his usual duties. I prescribed a mild cathartic sinapism to back of neck and spine, and diaphoretics after the operation of cathartic. 7th.—Somewhat relieved of febrile symptoms, but still suffering from headache; still disinclined to converse, only answering in monosyllables. As has been remarked, the symptoms were of those attending influenza, though in an aggravated form. 8th.—Pulse rather variable; pain in head still continues; tongue heavily coated and white. 9th.—Pain complained of in right ear, and not as much headache; could detect no swelling. At this time my attention was called to an eruption upon the arm. Upon examination, I found not only upon the arm but covering nearly the entire surface of the body, an eruption of circular spots, not elevated, of a bluish color, not unlike ecchymosis. The spots were entirely distinct; in size about half that of a five-cent piece. This eruption lasted for three or four days, gradually fading away, with some desquamation of cuticle.

On the 13th or 14th an abscess broke and discharged from the ear; discharge continuing for some days. Improvement was gradual, but under the influence of tonics, quinine, etc., patient improved favorably until the fourteenth day of the disease, when he left for his home in Western New York. C. C.

PMTNAM Co., N. Y., July, 1864.

PAY OF CONTRACT SURGEONS.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR—Are the large army of Acting Assistant Surgeons who are devoting their time and talents to the best interests of the soldiers and country, doing anything for their own? What has become of the proposition circulated some two

months ago, that all should unite in asking from Congress additional pay for their services? Congress having adjourned, of course application must be made to the Secretary of War, through the Surgeon-General.

As the case now stands, a large number of medical men, among whom are many skilled and experienced surgeons, are working for less pay than a good ship carpenter or printer receives. Some of these surgeons are placed in responsible posts, in charge of hospitals, transports, rendezvous, etc.; why should they not have at least the rank and pay and allowances—in a word, be put on the footing of Assistant Surgeons of Volunteers? They are willing and ready to give up their whole time and attention to the care of the sick and wounded soldiers for months consecutively, and surely Government should make a more adequate return for these services. The pay of contract nurses and hospital attendants has recently been advanced 50 per cent—why not that of Assistant Surgeons?

Cannot your widely circulating journal do something to bring about a concert of action in this matter on the part of this numerous and respectable body of men?

I would suggest that a convention be held at some central point, as for instance New York or Philadelphia, to which one or more delegates should be sent from each of the various hospitals scattered throughout the States, and that these delegates should consult together and decide upon some definite course of action.

There may be some better method proposed, but, at all events, whatever is done should be done quickly.

A "CONTRACT" SURGEON.

Army and Navy.

CIRCULAR LETTER.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., August 6, 1864.

To correct an error which has obtained to a considerable extent, Hospital Chaplains are informed that the law making it their duty to send monthly reports to the Adjutant-General of the Army, of the regiments, hospitals, or posts to which they may be attached, does not relieve them from the duty of making direct to the Surgeon-General, monthly reports of station, duty, and post-office address.

By order of the Acting Surgeon-General:

C. H. CEANE,
Surgeon, U.S.A.

GENERAL ORDERS, NO. 42.

HEADQUARTERS, DISTRICT OF NORTH CAROLINA.
NEWBERN, N.C., July 8, 1864.

J. W. Page, M.D., U. S. Sanitary Commission, having kindly consented to assume the arduous duties of Superintendent of White Refugees and Overseer of the White Poor of the District of North Carolina, he is appointed as such, and will be obeyed and respected accordingly.

By command of Brig.-General I. N. Palmer:

J. A. JUDSON,
Assist. Adjutant-General.

GENERAL ORDERS, NO. 22.

HEADQUARTERS MILITARY DIVISION OF THE WEST MISSISSIPPI.
NEW ORLEANS, LA., July 19, 1864.

The medical officers belonging to the colored regiments of the Corps d'Afrique, the consolidation and reorganization of which was ordered by General Orders No. 17, current series, from these Headquarters, will be examined by a Board of Officers, to be convened for that purpose in the City of New Orleans, under the direction of the Major-General commanding the Department of the Gulf. Officers belonging to the same regiment will be ordered to appear, in turn, before the Board, so that each post shall at all times have one medical officer present. On the completion of the examination the supernumerary officers will be mustered out of service.

By command of Major-General Canby:

C. T. CHRISTENSEN,
Major and Assist. Adjutant-General.

ARMY.

ORDERS, CHANGES, &c.

PROMOTIONS.

Assistant-Surgeon L. R. Dice, 57th U.S. Colored Troops, to be Surgeon in the same regiment.

APPOINTMENTS.

John Graham, of Pennsylvania, to be Medical Cadet, U. S. Army.
Isaac L. Ely, of —, Chauncey Leonard, of Washington, D.C., and William Phillips, of Pennsylvania, to be Hospital Chaplains, U. S. Army.
Dr. John S. McGrew, of Ohio, and Assistant-Surgeon E. W. Buck, 81st New York Volunteers, to be Assistant-Surgeons of Volunteers.

LEAVES OF ABSENCE.

Surgeon Francis Bacon, U.S.V., for sixty days.
Assistant-Surgeon H. R. Silliman, U.S.A., for fifteen days.
Assistant-Surgeon D. W. C. Peters, U.S.A., for fifteen days.
Assistant-Surgeon M. J. Asche, U.S.A., for twenty days.
Assistant-Surgeon Edward Cowles, U.S.A., for thirty days.
Surgeon R. K. Smith, U.S.V., for fifteen days.
Surgeon William Hayes, U.S.V., for twenty days.

ORDERS.

Assistant-Surgeon Alexander Ingram, U.S.A., is relieved from duty in the Department of Washington, and will report to the Commanding General, Department of the Pacific, for assignment to duty.

Assistant-Surgeon T. G. Mackenzie, U.S.A., is relieved from duty in the Army of the Potomac, and will report to the Commanding General, Department of Washington, for assignment to duty.

Surgeon Thomas M. Getty, U.S.A., is relieved from duty in the Department of the East, and will report to the Commissary General of Prisoners, to relieve Surgeon C. T. Alexander, U.S.A.

Surgeon C. T. Alexander, U.S.A., on being relieved, will report to the Commanding General, Department of Missouri, for duty as Medical Purveyor, St. Louis, Mo.

Assistant-Surgeon S. H. Orton, U.S.A., is relieved from duty in the Department of the Gulf, and will report to the Commanding General, Department of the East, for assignment to duty.

Surgeon Israel Moses, U.S.V., is relieved from duty in the Department of the Cumberland, and will report to Brigadier-General James B. Fry, Provost-Marshal-General, for assignment to duty.

Assistant-Surgeon J. M. Study, U.S.V., is detailed as Treasurer of the Officers' Hospital at Memphis, Tenn.

All officers now under medical treatment at Camp Parole, or at the post of Annapolis, Md., and those who may hereafter report for that purpose under existing orders, will, as soon as fit for field duty, be ordered by Colonel A. K. Root, Commanding, to rejoin their proper commands, without delay.

ASSIGNMENTS.

Assistant-Surgeon C. E. Goddard, U.S.A., as Surgeon-in-charge, Post Hospital, Fort Delaware, Del.

Assistant-Surgeon W. T. Okio, U.S.A., to General Field Hospital, Army of the Ohio, Marietta, Ga.

Assistant-Surgeon P. S. Conner, U.S.A., to Artillery Battalion, 19th Army Corps.

Assistant-Surgeon J. Sim Smith, U.S.A., as Medical Director of Transportation, City Point, Va.

Surgeon E. Swift, U.S.A., as Medical Director, Department of the Northwest, Milwaukee, Wis.

Assistant-Surgeon J. H. Kinsman, U.S.A., to temporary duty at the Hospital, 2d Division, 5th Corps, Army of the Potomac.

Acting Assistant-Surgeon C. H. Jones, U.S.A., to temporary duty in charge of Jarvis General Hospital, Baltimore, Md.

Acting Assistant-Surgeon P. W. Randle, U.S.A., as Attending Surgeon, Fort Vancouver, W. T.

Surgeon W. H. Watkins, 1st Oregon Cavalry, to join his regiment in the field.

Assistant-Surgeon E. M. Powers, U.S.V., to Post Hospital, St. Louis, Mo.

Assistant-Surgeon A. B. Prescott, U.S.V., to Totten General Hospital, Louisville, Ky.

Surgeon J. L. Teed, U.S.V., as member of the Board at Louisville, Ky., for examination of Medical Officers of U.S. Colored Troops.

Surgeon Rufus H. Gilbert, U.S.V., as Superintendent of Hospitals, Louisville, Ky., and vicinity.

Surgeon Burkitt Cloak, U.S.V., as Surgeon-in-charge of Cumberland Hospital, Nashville, Tenn., relieving Surgeon Clark McDermont, U.S.V., who is relieved at his own request on account of ill health.

Surgeon W. C. Daniels, U.S.V., to the Department of the Cumberland.

Assistant-Surgeon T. H. Sherwood, U.S.V., to Camp Curtin, Harrisburg, Pa.

Surgeon James M. Leete, U.S.V., as Medical Director, General Crooks' command, Department of West Virginia.

Surgeon Philip Harvey, U.S.V., as Medical Director, District of South Kansas, Paoli, Kansas.

Assistant-Surgeon J. H. Ledlie, U.S.V., to General Hospital, Jefferson Barracks, Mo.

Assistant-Surgeon W. A. Harvey, U.S.V., to Cavalry Corps Hospital, City Point, Va.

Assistant-Surgeon D. R. Brower, U.S.V., to Officers' Hospital, Fortress Monroe, Va.

Assistant-Surgeon C. B. Frazer, U.S.V., to Joo Holt Hospital, Jeffersonville, Ind.

Surgeon William Threlkeld, U.S.V., to Sherman Hospital, Nashville, Tenn.

Chaplain Isaac L. Ely, U.S.A., to Slough Barracks Hospital, Alexandria, Va.

Chaplain Chauncey Leonard, U.S.A., to L'Ouverture Hospital, Alexandria, Va.

Chaplain William Phillips, U.S.A., to General Hospital, Broad and Cherry streets, Philadelphia, Pa.

Lieutenant-Colonel E. P. Vollum, Medical Inspector, U.S.A., as Medical Director, Division of West Mississippi.

Surgeon George Derby, U.S.V., as Surgeon-in-Chief, 4th Division, 5th Corps, Army of the Potomac.

Assistant-Surgeon N. S. Drake, U.S.V., to Hospital of 2d Division, 2d Corps, City Point, Va.

Surgeon George M. Kellogg, U.S.V., as Medical Director, District of Harper's Ferry, West Virginia.

Assistant-Surgeon Frank Reynolds, U.S.V., to Artillery Reserve Brigade, Cavalry Corps, Army of the Potomac.

Surgeon George Rex, U.S.V., as Surgeon-in-charge, Military Prison Hospital, St. Louis, Mo.

Surgeon William Dickinson, U.S.V., as Attending Surgeon, Vet. Reserve Corps, Alexander Barracks, St. Louis, Mo.

NAVY.

Regular Navy.

Assistant-Surgeon William B. Mann, detached from the Miami and waiting orders.

Surgeon Edward R. Denhy, detached from the Wyoming and waiting orders.

Assistant-Surgeon H. W. Birkey, resignation accepted.

Surgeon B. R. Finsler, ordered to duty as member of the Board to examine candidates for admission to the Naval Academy at Newport, R. I.

Surgeon Samuel Jackson, ordered to same duty.

Surgeon G. R. B. Horner, ordered to the same duty.

Assistant-Surgeon F. B. A. Lewis, ordered to the Mahopac.

Passed Assistant-Surgeon J. B. Jones, ordered to Boston to take passage in the Circassian in pursuance of former orders.

Volunteer Navy.

Act. Assistant-Surgeon E. P. Colby, detached from the Sciota and waiting orders.

Act. Assistant-Surgeon L. Westfall, granted thirty days' leave of absence.

Act. Assistant-Surgeon G. K. Marvin, ordered to the Miami.

Act. Assistant-Surgeon J. Flynn, ordered to the Kensington.

Act. Assistant-Surgeon A. B. C. Sawyer, ordered to the Asecutney.

Act. Assistant-Surgeon Atwood Crosby, detached from the Ohio and ordered to the Ironoulla.

Act. Assistant-Surgeon Samuel Holman, detached from the North Carolina and ordered to the Wyalusing.

Act. Assistant-Surgeon Charles W. Sartori, of the Wyalusing, resignation accepted.

Act. Assistant-Surgeon C. Sturtevant, ordered to the Yantic.

George H. Naphey, appointed Act. Assistant-Surgeon and ordered to the Princeton.

James McMillan, appointed Acting Assistant-Surgeon and ordered to the North Carolina.

Act. Assistant-Surgeon W. F. Nutt, resignation accepted.

Medical News.

In 1863 no less than 1537 patients (15 of whom were not suffering from small-pox) were admitted into the Small-pox Hospital in London. The deaths amounted to 274, or 17 per cent. of the whole admissions. Of the whole number, 247 were unvaccinated, and 1273—no less than 83 per cent. of the admissions—vaccinated. The deaths amongst the unvaccinated averaged 47 per cent.; amongst the vaccinated, 9.9 per cent.—*Bost. Jour.*

THE CANADA MEDICAL JOURNAL and Monthly Record of Medical and Surgical Science, is the title of a new journal established at Montreal, Canada, and edited by G. E. FENWICK, M.D., and F. W. CAMPBELL, M.D.—PROF. PERCY writes under date of August 8:—"Three times to-day I have been questioned about articles that have appeared in the 'N. Y. Medical Independent,' and upon denying any knowledge of the subject I have been told that it is currently asserted that I am one of the editors of that journal. Will you allow me through your columns to state that I never have had any connexion whatever with the 'N. Y. Medical Independent,' excepting that upon request I contributed a short article to the first number, for which I received the usual price paid by medical journals for contributions."—DR. GRIMSDALE, of Liverpool, reports three successful cases of ovariectomy.—THE Medical Mirror is the title of a new monthly medical journal issued in London.—DR. PETER SPOFFELLA has been made a Knight of the Austrian Order of the Iron Crown.—DR. MURCHISON estimates that there is an average of one death from typhus to every five cases.—We have cursorily examined the advanced sheets, lately received from Glasgow, of DR. McLEOD's new work on "Outlines of Surgical Diagnosis." From the fluent language in which it is written, and the general arrangement of the subjects, we think that it is a book which will meet with great favor by our confrères, and will add to the author's already prominent position as a writer. It is being reprinted in their usual good style by Messrs. Baillière Bros., and will be ready in about a month.—N. R. DERRY, of Lockhaven, Pa., Surgeon U.S.V., Medical Director of Corps, was wounded April 21, 1864, on the Red River Expedition under Banks. The ball entered the middle of sacrum, a little to the right of the median line, and passed through the side of the sacrum in the vicinity of the great sciatic nerve.

Original Lectures.

LECTURES ON THE TREATMENT OF STONE IN THE BLADDER.

DELIVERED BEFORE THE CLASS IN THE MEDICAL
DEPARTMENT OF THE UNIVERSITY OF
THE CITY OF NEW YORK.

By ALFRED C. POST, M.D.,

PROFESSOR OF THE PRINCIPLES AND OPERATIONS OF SURGERY, ETC.

LECTURE I.

(Concluded from Page 74.)

Acids do not generally appear to exert as decided an influence in the treatment of phosphatic calculi as alkalies in the treatment of calculi composed of uric acid. Leroy d'Etiolles prefers hydrochloric acid to the other mineral acids. He recommends at the commencement of the treatment, five drops morning and evening. The dose may be gradually increased to twenty-five drops three times a day. It should always be largely diluted. Carbonic acid has been recommended by different authors. Priestley (Experiments and Observations on Air, Vol. II. p. 216); Percival (Medical Essays, Vol. I. p. 131); Saunders (in Percival's Medical Essays, p. 296); Falconer (Account of the Efficacy of Aqua Mephitica Alcalina in Calculous Disorders, London, 1792). Laizon, of Toulouse, relates two cases of cures effected by Seltzer water. In one of them the presence of the stone had been demonstrated by sounding, and the patient had been well for eight years when the case was reported. These cases are recorded by Fourcroy (*Médecine éclairée*, tome IV. p. 220). Carbonic acid was also recommended by Brande. The mineral springs of Contrexeville, in France, have acquired a high reputation in the treatment of calculous diseases. Vichy and other mineral waters have obtained a similar reputation.

Regimen has a marked influence on the progress of calculous diseases. By experiment and observation, Magendie has shown that food which contains a large proportion of nitrogen leads to the production of uric acid. He relates an interesting case of a merchant who had a series of successes and reverses in his business. While he was prosperous and lived luxuriously, he suffered from gravel; when he met with reverses and was obliged to deny himself the pleasures of the table, he was relieved (*Traité de la Gravelle*, p. 19). By experiments on animals, he found that when they were fed on food containing no nitrogen, uric acid disappeared from their urine. He therefore recommended patients suffering from uric acid calculi to take little or no animal food, to make free use of diluents, to abstain from alcoholic stimulants, and to take active exercise. Leroy d'Etiolles has in a number of cases successfully prescribed Magendie's regimen, with the addition of carbonate of potassa, as taken by Masengrie.

The facts which have been presented seem to indicate that lithontriptic remedies, judiciously administered, are sometimes successful, not merely in removing the acrid condition of the urine and in relieving the irritation of the urinary organs, and thus retarding or preventing the formation of calculi, but in causing the solution and elimination of concretions which have actually formed. There is no doubt that, in some of the alleged cures, the success has been apparent and not real. But there are other cases in which the testimony is so complete as to leave no room for doubt of the entire success of the treatment. But it is nevertheless true, that the failures have so largely exceeded in number the successful cases, as to afford very small ground of encouragement for the use of this class of remedies with reference to a radical cure.

Under ordinary circumstances, therefore, I would not recommend you to waste any time in the attempt to procure the solution of stones in the bladder by internal reme-

dies. It may then be asked—What is the legitimate scope of medical treatment in the management of urinary calculi? I will endeavor to answer this question. In the first place, medical treatment may be very efficient as a prophylactic agency in preventing the formation of calculi in the bladder, when such formation is threatened. When the urine is highly acrid and irritating in its quality—when it deposits sand or gravel in considerable quantity—when microscopical examination reveals numerous crystals—when the reaction of the urine is alkaline, or when there is an abdominal excess of acid—and when the patient has already passed renal calculi—there is manifest danger that concretions may be formed in the bladder. In all such cases the condition of the urine should be carefully and repeatedly investigated by means of chemical tests and of microscopical examinations. If the reaction be abnormally acid, and if crystals of uric acid or urate of ammonia be detected, the alkaline treatment may be advantageously resorted to. If, on the contrary, the reaction of the urine be alkaline, and phosphates abound in it, mineral acids, largely diluted, will be the appropriate remedies. If there be abundant crystals of oxalate of lime, special attention should be paid to the general health of the patient, and an attempt should be made to improve its condition by relaxation from business, by cheerful recreation, by exercise in the open air, by generous diet, and by all other appropriate means.

In the second place, medical treatment may be of service in relieving any excessive irritation which may occur in connexion with stone in the bladder. It is well known that persons affected with these concretions suffer much more from their presence at some times than at others. A person with a stone in his bladder may enjoy a considerable amount of comfort for months or for years, not suffering much pain except during the passage of his urine, and immediately afterwards, or after a sudden jolt or jar, this long calm may be abruptly followed by a storm. In consequence of violent exercise, of irregularities of diet, of exposure to the vicissitudes of the weather, or of various other exciting causes, the bladder may become the seat of intense irritation, which may be propagated to adjacent organs, or even to those which are remotely situated. This irritation is characterized by severe pain, frequent micturition, and by a greater or less amount of constitutional disturbance. It is familiarly known as a fit of the stone. It always requires medical treatment. Absolute rest in a recumbent posture should be strictly enjoined. Warm baths and diaphoretic medicines will be found useful in promoting perspiration, and thus causing a diversion from the kidneys to the skin. Laxative medicines may also be administered with benefit, removing irritating materials from the alimentary canal, purifying the blood, and imparting a more healthy character to the secretions. Acids or alkalies may be administered, according to the chemical reaction of the urine. Diluent and demulcent drinks will also be of service. Opiates or anæsthetics should always be employed to such an extent as may be necessary to moderate the severity of the irritation. In cases of active inflammation, bloodletting, general or local, may be required, according to the severity of the inflammation and the rigor of the patient's constitution. When the inflammation is chronic in its character, benefit is often derived from the use of certain stimulating diuretics, as *diosma crenata*, *uva ursi*, *pareira brava*, etc.

In the third place, medical treatment is in most cases beneficial in preparing the patient to undergo a surgical operation, such as his case may require. For this purpose, any deviation from a healthy condition should as far as possible be rectified. The patient should be kept at rest for a few days before the operation. His mind should be free from the cares and anxieties of business. If the circulation be too active it should be reduced by a regulated diet, by laxative medicines, and by other appropriate means. If, on the other hand, the circulation be feeble and languid, he should have a generous diet, and tonics and stimulants

should be administered. Any intercurrent disease which may exist should be treated by appropriate remedies.

In the fourth place, when on any account the patient declines a surgical operation, such treatment should be adopted as will reduce to a minimum the irritation which is attendant upon the disease. For this purpose strict attention should be paid to all the means by which the general health may be improved, and all extraneous sources of irritation should be carefully avoided. The patient should lead a quiet life, avoiding violent exercise, carefully regulating his diet, guarding himself against sudden changes of temperature, keeping his body warmly clothed, and avoiding mental excitement. By the adoption of such hygienic precautions, and by the use of such palliative remedies as may be adapted to his case, according to the rules which I have laid down, the patient may often be saved from a large amount of suffering, and the fatal effects of the disease may be postponed to a remote period.

Original Communications.

DIFFICULT OBSTETRICAL CASES.

By GEO. T. ELLIOT, JUN., M.D.,

PROFESSOR OF OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN IN THE BELLEVUE HOSPITAL MEDICAL COLLEGE; OBSTETRIC PHYSICIAN TO BELLEVUE HOSPITAL AND THE LYING-IN ASYLUM; CONSULTING PHYSICIAN TO THE NURSERY AND CHILD'S HOSPITAL.

(Continued from page 41, vol. viii.)

CASE CXIX.—Puerperal Convulsions—Albuminuria—Efforts at Manual Dilatation of Cervix—Douché—Barnes's Dilators—Still-born Putrid Child Delivered by Manual Traction—Death of Mother.

On the 29th of July, 1864, Dr. John C. Hutchison sent for me to see Mrs. — of Brooklyn, aged 36. She had thrice miscarried at the second or third month, and was now near the eighth month of gestation. She was very stout, weighing about two hundred and fifty pounds; a hearty, healthy-looking woman of a very nervous temperament. With the exception of the miscarriages referred to, she had always been a healthy woman; but about two months ago she presented evidences of oedema of the face and upper extremities, which led the doctor to make several examinations with heat and nitric acid for albumen, but none could be found. No microscopic examination made. Secretion normal in quantity. She was kept under the use of saline cathartics, and not allowed to use any meat. Six leeches were applied over the kidneys. Warm hip-baths. During the night of the 26th and 27th the patient was extremely restless. Dr. Hutchison saw her at seven p.m., 26th; she had just returned from a long ride and was considerably fatigued. Complained of pain in nucha; headache did not occur until about three hours subsequently. At four a.m. of the 27th, she fell into a well marked epileptiform puerperal convulsion, during which she bit her tongue. Consciousness returned; vs. ad 3xx. and a mercurial cathartic, although there had been some diarrhoea lately. At five a.m. another convulsion, and between that hour and nine p.m. she had thirteen convulsions in all. Her consciousness would return in the intervals, though she was not entirely rational. Very nervous and excited. Jactitation most marked and incessant. It was endeavored to anticipate the convulsions by the use of chloroform, and Dr. McClellan was brought in consultation. After his arrival an effort was made to dilate the cervix uteri manually. The cervix was high up, long, and entirely undilated. With care and time the ends of three fingers were introduced, but it was not further dilatable. During the night of the 27th she was kept for the most of the time under the influence of chloroform. On the morning of the 28th several convulsions were arrested by

chloroform. Bowels freely opened. Urine abundant and sometimes discharged unconsciously. No farther dilatation of the cervix, and not a labor pain. Occasionally conscious. Douché of warm water within the cervix once for twenty minutes. Complained of epigastric pain and vomiting, which were relieved by a drachm of the bi-carbonate of soda. Great jactitation. Complains now, and has before, of a "blur" over the eyes. 29th. Extremely nervous, much jactitation, but not to so great an extent, as the patient is weaker. No convulsions, as their approach is anticipated by chloroform, of which she requires very little and which seems to agree with her admirably well. At two p.m. complains, for the first, of pain in her back and lower part of her bowels, which recurred in half an hour. Four p.m., cervix lower, soft, and dilatable. Head presents. Such was the history of the case given to me on my arrival by the doctor, who had been almost constantly by the bedside for about thirty-eight hours.

I found the patient in a perfect twitter of excitement, talking, screaming, twitching convulsively, very restless, asking hurried questions, very fearful of being hurt or touched, and apprehensive of evil. Conscious of all that was going on, but intelligence still clouded. Skin of good temperature; strength good; pulse 160, full and strong; lips of good color, but the pupils of the eye much contracted, although there was not much light in the room, and her face turned away from what there was; the eyes were glassy. There was some oedema of the legs. Vagina of good temperature and free from offensive discharges. Cervix uteri dilated to about the size of a dollar, well enough down, and entirely undilatable to the fingers. Membranes ruptured, but exactly when could not be determined. Head recognised to present, and some of the puckered scalp passed through the cervix. Cranial bones did not move on each other when touched. No foetal heart or foetal movement to be recognised or provoked. (Labor pains at two p.m. 29th, commencing in back; recurred every half hour until about nine p.m.)

It was evident that prompt delivery was most essential, and yet thorough manual dilatation and the douché of the previous day had not advanced matters as satisfactorily as could be wished. I recommended the use of Barnes's dilators, which I had brought with me, and the prompt delivery of the foetus as soon as dilatation could be effected, and I left. It was then nine p.m. Dr. Hutchison then introduced the medium-sized dilator which I left with him, and having distended it as far as the cervix would allow, left it *in situ*. It remained an hour, when it was found in the vagina, and the cervix appreciably dilated. He re-introduced it twice, and the third time he dilated it to its fullest extent, and withdrew it at one a.m. of the 30th with some little difficulty, as the cervix, although sufficiently dilated to admit the hand, still yielded sluggishly and preserved its undilatable character. The doctor now introduced his hand and carried it carefully up to the neighborhood of the child's feet with the intention of turning, but at this time the patient seemed to grow rapidly weak, abdomen became suddenly tympanitic at half-past twelve a.m., attended with vomiting of a dark green fluid. No sharp pain, and the uterine contractions, which had been of scarcely any force, ceased for a time, although they subsequently returned. Giving up the idea of version, the doctor now examined the head carefully, and found that the bones could be moved on each other; and grasping the puckered scalp and the angle of a parietal bone, he withdrew a male child, aided by feeble uterine contractions. Placenta came away in a few minutes; no post-partum hemorrhage; uterus contracted well. The mother continued to sink, and died at three a.m. of the 31st. I was sent for when she was sinking, and arrived after her death. The child's cuticle peeled off readily. It was discolored, and weighed about five pounds. No autopsy.

Remarks.—The action of the dilators was all that could have been expected. Perhaps there are no cases in which an undilatable cervix is more obstinate than in some of these

eases of uræmic convulsions. In this one it appears that venesection, chloroform, manual dilatation, douche, and a great interval of time, had failed to do more than effect a dilatation equal to about a dollar, and left the cervix undilatable. Uterine contractions were too inefficient and powerless to aid the mechanical means to any extent. The delivery was effected by the dilators and Dr. Hutchison's tractions. The case impressed me powerfully as one of those in which, even if the cervix were fully dilated, labor pains would scarcely intervene; and I recommended the doctor to use a male elastic catheter, No. 8, introduced between the uterus and the foetal head, if it became necessary to bring on these pains as an aid to delivery.

CASE CXX.—Albuminuria—Intra-Uterine Hydrocephalus—Child born alive—Autopsy—Mother did well—Bellevue Hospital. From the Notes of Dr. Wm. Lee, House-Surgeon.

Isabella Woods, æt. 20, primipara, admitted into Bellevue Hospital on the 18th of June, 1864, having just arrived from Ireland after a trip of fourteen days in a steamer. Strong and muscular woman, who had been accustomed to work on a farm. Had been confined to bed during the voyage with headache, vomiting, and constipation, which she ascribed to sea-sickness. States that she never was ill before. Uncertain as to the date of the last menstruation. June 20th.—Nitric acid discloses the existence of albumen, although heat alone was not sufficient. Sp. gr. 1024. No casts were found by the microscope. No other symptoms of disease of the kidneys. By direction of Dr. Elliot the patient was not allowed meat, and the bowels were kept free by salines. June 22d, five A.M.—Labor pains. First stage, six hours; second, four hours. Presentation vertex. L. O. A.—Uterine contractions vigorous. Foetal heart on the right side, midway between the umbilicus and the ant. sup. sp. process of ilium. Placenta came away promptly. No hæmorrhage. Good contraction.

The child made one or two ineffectual efforts to breathe, and the heart could be felt beating for five minutes after delivery.

Post-mortem by Drs. Young and Farrell, in the presence of Drs. Elliot and Lee. The size of the head led Dr. Elliot to direct that it should be cut off and weighed separately. Whole weight of child 9 lbs. 13 oz. Sex, female. Head alone weighed 2 lbs. 13 oz. The head measured transversely from centre of parietal bone to centre of parietal bone, after removal of the scalp, $5\frac{1}{4}$ inches. Under the same circumstances the circumference of the skull measured $15\frac{1}{2}$ inches; the line being drawn from the protuberance of the occipital bone around the head over the frontal eminences. On opening the skull the ventricles were found very greatly distended by a limpid fluid which escaped. The amount was estimated at $\frac{3}{4}$ xij. Some congestion apparent, and some clotted blood was found spread over the tentorium. This was at first supposed to have escaped from the lateral sinus, but on looking more carefully when the left lobe was lifted, it was seen to have been extravasated on that side, and such was doubtless the case on the right. The kidneys were examined microscopically, and found to be healthy, as were the thoracic and abdominal viscera.

Still without the autopsy one would scarcely have been willing to pronounce the case one of dropsy. The separation of the bones was not greater than often met with.

CASE CXXI.—Atelectasis—Post-mortem. Dr. Lee, House-Surgeon—Bellevue.

Catherine Feilon, æt. 24, primipara, domestic; in habit of having promiscuous intercourse with men; has a somewhat suspicious eruption on chest and shoulders. Gives no history of syphilis or uterine disease. Small in frame; not strong looking. "Consumption in the family."

Delivered June 23d, at twelve P.M., of a living female child, weighing 6½ lbs. Labor natural, and lasted fifteen hours; second stage, five. Presentation vertex. L. O. A.—The child was covered with meconium, and passed water immediately after birth, but breathed with difficulty, though the heart-beat was strong. Dr. Lee used Marshall Hall's

method, hot and cold water, frictions, etc., for three quarters of an hour before the child could be induced to breathe in other than a spasmodic manner. At the end of this time it was wrapped up in cotton, and covered with oiled silk.

When I first saw the child the color had become natural, but the lungs were not satisfactorily inflated, and I thought that I detected comparative dulness over the left chest. I recommended renewal of the hot and cold water, and other excitation, and then to replace the child in the cotton. It could not nurse; was spoon-fed; urine and fæces normal. On the following day the child breathed with the expiratory moan.

Post-mortem.—Slight crepitation around the margin of the left lung. The rest unexpanded and non-crepitating. No evidences of pneumonia. Both lungs readily and fully blown up with the blowpipe.

Pleurae, heart, thymus, kidneys, brain, all normal. The bladder contained urine, which was examined by Dr. Birkhead, at my request, and found to be non-albuminous, and to present crystals of uric acid and of the triple phosphate.

CASE CXXII.—Deformity of Pelvis—Albuminuria—Forceps and Version failing, Delivery effected by Craniotomy—Use of Simpson's Cranioclast, as modified by Barnes—Accurate Measurement of Pelvis by Dr. J. Lumley Earle—Pelvimeter—Pneumonia and Metritis—Autopsy—Bellevue—Dr. Wyckoff, House Physician.

Margaret Dolan, second confinement; entered the lying-in ward of Bellevue Hospital on the 9th of June, 1864, at three, A.M. She stated to Dr. Wyckoff that on the 9th of September, 1861, she had been delivered of a living male child, which, she said, weighed seven pounds and a half, and which lived to be eleven months and two weeks old. The labor was very tedious; two physicians had been with her, one of whom remained with her for twenty-four hours. She remembers nothing that the doctors said; cannot say whether she took an anæsthetic, but knows that she was unconscious during her delivery. Does not know whether instruments were used or not. She had a good recovery; sat up on the third day, and "went round" in a week. Patient states that the waters began to come away on Wednesday, two days before, and that from that time she had been suffering from labor pains of a "short stinging character."

First stage of labor completed by nine A.M. Moderate caput succedaneum. Catheterization necessary, and rendered difficult by pressure of the foetal head. Patient manifests great irritability. She places herself in every possible position on the floor and bed. Frequent cries for assistance. Tenesmus constant and annoying, although the bowels were recently evacuated. Thirty drops of laudanum without effect. Occasional doses of stimulants. Loses self-control. Allows examination with great repugnance. Catches physicians by the hair. Examination of the urine drawn by the catheter reveals a slight albuminous deposit.

After waiting thirteen hours and a half from the period of the completion of the second stage, there having been no advance of the head during that time, and no change in the restlessness and mental condition of the patient, Dr. Elliot decided that it was hopeless to expect more from the powers of nature, and that she must be delivered instrumentally.

There were present, besides the members of the house staff, Dr. Storer of Boston, and Dr. Swift.

The foetal heart was beating. By the use of Dr. J. Lumley Earle's pelvimeter (described in the Transactions of the London Obstetrical Society, Vol. III., p. 145), the antero-posterior diameter of the brain was made out to be $3\frac{1}{4}$ inches. The post-mortem measurement made it out to be $3\frac{1}{2}$ inches. Had the instrument used been properly made by Mr. Mathews, of Portugal street, London, as the inventor designed, and as delineated in the "Transactions," even this trifling discrepancy of one-eighth of an inch

would not have occurred; but the instrument which I ordered from London only registers quarter inches instead of eighths of inches, as engraved in the drawing of the original instrument. The case was one in which manual measurement could not be accurately employed before delivery, because the caput succedaneum and a small arc of the foetal head dipped within the brim, so as to prevent measurement with the fore-finger, and there remained only such guess-work as might be effected by the introduction of the fore and middle fingers, and thus spanning the portion of the head pressing below the plane of the brim. I admit the possible accuracy that can be thus attained if one has graduated blocks to slip between those fingers to the metacarpus before their withdrawal; but the instrument of Mr. Earle satisfied me in this instance very well indeed. It is a difficult matter to make such measurements accurately under such circumstances, as every one knows who has tried it, and I made several efforts before I was perfectly satisfied to rely on the result. It surprised me to find that it succeeded more to my satisfaction when introduced in an opposite direction to that for which it was designed, viz. with the *concavity* of its curve regarding the *convexity* of the sacrum, the woman being on her left side with the knees drawn up.

This measurement having been made, and the woman being under the influence of chloroform, she was replaced on the back, and the bladder emptied with the catheter. The first blade of the forceps was then carried behind the left acetabulum by a spiral curve (it having been introduced in front of the left synchondrosis), and the other was placed in front of the right sacro-iliac synchondrosis (the occipital being to the right), and were then locked just within the vulva. All warrantable efforts at traction were made without any avail, the handles being passed back so far as to slightly lacerate the posterior fourchette, in order to insure that the tractions were fully in the direction of the superior strait. The foetal heart was beating to the right, and the hand could recognise the funis on the right of the promontory, just above the brim, in a position which rendered prolapse very imminent. The alternatives of version and craniotomy remained, and were decided in favor of version, although that operation was rendered extremely difficult by the long escape of the waters. Efforts at version by external manipulation were fruitlessly made, and I then seized the left knee and brought the left foot to the vulva, but I could not turn the child; the head could not be pushed up either from within or without, or by conjoined manipulation. It was not at all wedged in the brim, but it could not be moved far above the brim; having faithfully tried version. The funis had meanwhile prolapsed, and its pulsations at last ceased. I then had the head steadied above the brim by an aid, and introduced Blot's perforator. To bring away the head was a very tiresome and long-continued task, nor did it pass until most of the parietal bones had been brought away piecemeal, and the frontal and occipital bones completely crushed by Simpson's cranioclast; only the bi-mastoid diameter was left unbroken. Meigs's forceps were found useful in removing broken pieces of the parietal bones. Churchill's crotchet broke up the brain, and delivery was finally effected by the cranioclast. I knew that there would be great difficulty if the operation had to be resorted to, and had provided myself with everything necessary, including Scanzoni's cephalotribe. Generally speaking, I can deliver with Churchill's crotchet, but not in this instance. The operation was very fatiguing, and when the head was delivered there was not a trace of brain left in the cranium. Contraction immediately followed. A large and healthy placenta followed in thirty minutes. No hæmorrhage. Child weighed in its mutilated condition six and a half pounds. The whole time occupied in the delivery was two hours and a half. Ergot, opium, and stimulants were then administered. Patient came promptly and satisfactorily from the chloroform.

June 10th.—Patient declares herself as feeling very well.

Pulse 80-90 during the day. Says that she is a little sore. Urine drawn. Has slept easily. *During the day she managed to get out of bed while the nurse was in the next ward, and walked on her bare feet to the water closet before she was seen.* June 11th.—Found leaning over her bed to arrange something beneath. Says she feels well, but complains of pain in the left side. Pulse 100. During the night small amount of urine. In the evening $\frac{3}{4}$ xxvj. drawn. Uterine discharge slight. Tincture of aconite and the hypodermic injection of morphine ordered. June 12th.—Signs of pneumonia over base of left lung. Pulse 124-130. Decubitus on right side. Face flushed, short painful cough, no expectoration. Abdominal tenderness when deep pressure is made. Lochia small, offensive, and leaves a yellowish stain. No swelling of external genitals. Bowels moved. Urine slightly albuminous. Oiled muslin jacket to chest. R. of aconite and hypodermic injection of morphia. Diet nutritious. Stimulants.

June 13th, 12.30 P.M.—Died. Pulse was full and strong at eleven P.M. For eight hours before death her respiration had been labored. Short sighing inspiration, and long expiration with mucous rattle in the throat. Pupils normal. Respiration never below 16 to the minute. Pulse from 104-110; having fallen under the aconite at eight P.M. June 12th, from 124 to 108, only once after that to 112.

Autopsy, June 14, 1864.—Made by Dr. Brownell in presence of the Staff and Dr. Elliot. Weather warm. Body very fat. Great discoloration of skin everywhere. Face greatly congested. Abdomen greatly distended with gas. Peritoneal surface perfectly smooth, with no signs of inflammation. About $\frac{3}{4}$ j. of iliac fluid, however, in the cavity. Upper part of vagina much congested. No pus seen in uterine sinuses, a very little blood. A very small quantity of pus in right fallopian tube. More in the left tube. Left lung: lower lobe solidified by pneumonia except along lower edge, weight 1 lb. 4 oz. Right lung healthy, weight 1 lb. 1½ oz. Spleen large, weighed 1 lb. 5½ oz., healthy looking.

Pelvis.—Antero-posterior diameter of brim 3½ in. Transverse of brim 4½ in. Outlet undiminished.

Uterus.—Microscopic examination by Dr. Birkhead. Pus in uterine sinuses, none under the peritoneum of the broad ligament. *Heart*.—Slight fatty degeneration of the muscular fibres. *Liver*.—Prof. A. Flint, Jr., reported that "scrapings from a cut surface of the liver presented under the microscope a field filled with fatty granules and globules, with the liver-cells filled with fat." Dr. Flint also says, "I send you a sketch of the appearances in one of the kidneys. The convoluted tubes are filled with granules, which have not, however, the bright appearance characteristic of fat. The appearances in both kidney are the same. In the field are also seen granules and the renal cells filled with granules."

CASE CXXIII.—*Contracted Conjugate Diameter—Tonic Contraction of Uterine Fibres Circularly above the Cervix—Exhaustion of Mother—Failure of Forceps twice applied after an interval of three hours—Impossibility of Version—Craniotomy—Recovery of Mother—Bellevue Hospital, Dr. Raphael, House Surgeon.*

Mary Reynolds, æt. 28, single, Irish. Last menstruated in Sept. 1862. Taken with labor pains at nine P.M., June 28th, 1863, which scarcely allowed her to sleep during the night, and by eleven A.M., June 29th, the os was fully dilated and the presentation easily ascertained to be L. O. A. The membranes ruptured at about this time and the pains increased in severity and duration during the day, without, however, influencing the progress of the child. Three P.M.—Foetal heart beating distinctly. Five P.M.—Patient shows evident signs of exhaustion from the severity of the pains, which have continued all day with scarcely an intermission; and as she had not slept any during the day and scarcely any during the previous night she was kept under the influence of chloroform for two hours, when she awoke and expressed herself as much refreshed. At eight P.M. the pains set in again with full force, the woman at the same time

bearing down with all her power, without, however, doing more than wedging the head into the brim of the pelvis. At nine P.M. Dr. Elliot examined the patient again, and found that the head had escaped pretty well through the cervix uteri, but that above the head a band of tonically contracted circular fibres prevented the advance of the child. In addition to this he diagnosticated that the antero-posterior diameter of brim was contracted to $3\frac{1}{4}$ inches. Members of the house staff were invited to feel the circular contraction of the uterus and distinctly recognised it. Dr. E. then applied his forceps, the application of which was difficult, but though tractive efforts failed to advance the head, version was rendered impossible by the condition of the uterus. As the general condition of the patient was still good, Dr. E. decided to wait three hours longer. Pulse 85. Parts still moist and of good temperature. Foetal heart beating. June 30th, one A.M.—Condition of the patient has materially changed. She appears to be much exhausted, is restless and irritable. Parts are now hot and dry. Pulse 100. Foetal heart scarcely audible. Not the slightest advance of the head. Dr. Elliot again applied forceps and made a thorough but unsuccessful effort to advance the head. He then performed craniotomy and delivered the head with some difficulty. The passage of the child's body was comparatively easy. Child estimated to have weighed (with the brain) about nine pounds. Forty minutes afterwards the placenta came away with but slight hæmorrhage. July 1, eight A.M.—Patient slept some five hours and feels comfortable. Looks very much debilitated and pale. With stimulants and nourishing diet, she made a slow but good recovery, and left the hospital on the 18th of July.

Remarks.—In this case I was obliged to perform craniotomy while yet the foetal heart was beating—the saddest and the most melancholy duty that can fall to the lot of an obstetrician; very rarely, indeed, ever necessary, but as I believe unqualifiedly justified in this case by the record, and heartily approved by all present. To have waited longer would have perilled the mother's life too greatly.

CASE CXXIV.—Delayed Labor—Forceps and Conversion of a Right Occipito-Posterior Position—Facial Paralysis of Child and its Recovery after Convulsions—Mother Did Well—Bellevue Hospital, Dr. Munson Coan, House Surgeon.

Mary Fane, second pregnancy, æt. 25, Irish. Labor pains commenced in Bellevue Hospital October 29th, 1862, and were neither powerful nor frequent until the rupture of the membranes on the 30th, at 4.30 A.M. Having then augmented in power and frequency, the head descended to the inferior strait, but no further progress was made till one P.M. The case was then examined by Dr. Elliot and diagnosticated to be right occipito-posterior. The foetal heart was loudly audible over the anterior part of the abdominal wall as high as the umbilicus. The vagina was moist and of good temperature, woman robust and of good condition, pains feeble. Four hours more passed without advance. Caput succedaneum augmented. Foetal heart less distinctly audible, pains very forcible. The patient being brought under the influence of chloroform Dr. Elliot applied forceps, and rotated the occiput under the symphysis. The child was delivered almost lifeless. It was revived by hot and cold affusion. Facial hemiplegia existed on one side, which had partially disappeared when the child left the hospital on the thirty-fifth day. On the second and third day of June the patient had several convulsions which resembled those of trismus nascentium.

Placenta removed by Dr. Elliot thirty minutes after delivery. The uterus contracted and relaxed alternately for two hours and a half, when some clots were expelled.

The recovery of mother was rapid and without an untoward symptom.

THE TREATMENT OF ANEURISM,

INVOLVING THE SUBCLAVIAN IN SUCH A PART OF ITS COURSE, THAT A PROXIMAL LIGATURE IS ONLY APPLICABLE WITHIN THE SCALENÆ.

By T. T. SABINE, M.D.,

OF NEW YORK.

(Concluded from page 76.)

LIGATURE.

IX. DISTAL LIGATURE.—Since Deschamps, in 1798, first applied the distal ligature for the cure of an aneurism in the groin, the operation has been performed a number of times, and with almost universal failure. After the application of the ligature the blood stands in one of two relations to the sac—either it is entirely arrested, merely receiving an impulse with each systole of the heart; or a small current, greater or less according to circumstances, still circulates through it. Which of these two conditions shall exist depends on whether collateral branches arise between the point of ligature and the tumor. If such branches do not exist, then the sac will be in the first of the above conditions; if they do, then it will have the two conditions combined; for though some of the blood which enters the sac will pass off by the collateral branches, still the greater part will exert merely a distending influence, from its inability to get beyond the point of ligature. In subclavian aneurism either of these conditions may exist. The position of the particular aneurisms to which I refer would, in almost every case, prevent the application of a ligature above the clavicle. Ligature of the axillary, where it becomes brachial, would be evidently useless, and needs no discussion. The only point to which it could be applied with any chance of success would be immediately below the clavicle, a situation in which not only is the operation very difficult, but the results are very unsatisfactory, owing to the number and close approximation of the collateral branches preventing the formation of one or both clots. I have collected three cases in which the operation has been performed for aneurism involving the subclavian alone.

DEPUYREX ("Vascular Lesions").—The patient had an aneurism, following violent exertion. This was treated by means of ice and the Valsalvan method, but without success. A ligature was then applied to the axillary, just below the clavicle. On the sixth day hæmorrhages occurred. These recurred, and the patient died on the ninth day. The autopsy showed a small clot above the ligature. "There was an opening at the seat of ligature into the artery; but this appeared to have been done in dissecting, or by pulling at the ligature." The hæmorrhage was supposed to have been caused by the ulceration of some small, undiscovered branch, and not by the rent artery.

PETREQUIN (*Gazette Hebdom.*, t. i., p. 192).—In this case a distal ligature was applied above the clavicle. Two days after, the tumor continuing to pulsate, perchloride of iron was injected. Three successive hæmorrhages occurred, and carried off the patient on the twelfth day after the first named operation. The hæmorrhage probably came from the distal extremity of the ligature.

SCHUB (Langenbeck's "Year Book of Surgery," German).—Here the ligature was applied below the clavicle. On the twenty-first day hæmorrhage occurred, and by its recurrence carried off the patient on the twenty-fourth day. On examination, it was found that the blood came from the proximal side, the distal being plugged by a firm fibrous clot.

We thus have three cases, all terminating in death.

The operation has been performed for other aneurisms a number of times, especially for those involving the innominate and the origins of its branches. Erichsen has collected the details of twenty-seven cases in which this operation has been performed. Of these he finds that in twenty a fatal result speedily followed the operation, while in the remaining seven the patient survived the ligature of

the artery, though he was not at all cured of the disease for which the operation was practised. The reasons why this operation does not succeed in those cases in which the ligation has been successful, have already been mentioned,—viz. first, the continuance of some circulation through the tumor; second, the distension caused by the impulse of the blood. This great mortality and want of success was what induced Fergusson to propose amputation. In conclusion, I would say that, with the present statistics, this operation should be banished from the treatment of subclavian aneurism.

X. PROXIMAL LIGATURE.—The successful employment of this method is the great desideratum in the treatment of all aneurisms. No other, excepting perhaps indirect compression, affords so safe, speedy, and effectual a cure as this; and hence in those cases which have been hitherto unsuccessful, it should be our aim to seek out and remedy, if possible, the causes of failure. This is the more important in subclavian aneurism where indirect compression is impossible, and the other methods inapplicable. These methods I have already briefly discussed, and the conclusion arrived at was, that none of them, excepting perhaps amputation, afford much, if any, chance of success. Amputation has never been resorted to, and hence all reasoning upon the subject can only be hypothetical; besides, amputation necessitates the loss of a most important member, in most cases the *right* arm, and ought not to be thought of if proximal ligation can be rendered a tolerably successful operation. Hitherto it has not been so, and I shall now discuss the different operations that have been performed, their causes of failure, together with two new operations which have not yet been tried, but either of which appears at present to afford good grounds for believing that they will prove successful. One of these has been already spoken of by different surgeons; the other I have not heard mentioned, and therefore I do not know whether it is original with myself or not.

Four different operations have been performed, viz: 1st. Ligation of the innominate; 2d. Ligation of subclavian in the first part of its course; 3d. Ligation of both subclavian and carotid, just beyond their origins; 4th. Ligation of subclavian, carotid, and vertebral, just beyond their origins. Two new operations are proposed—viz. 1st. Ligation of subclavian, carotid, vertebral, mammary, and two or more branches of the thyroid axis, in fact every artery that can be reached that exerts any influence on the aneurism; 2d. Ligation of the innominate, carotid, vertebral, mammary, and the three branches of the thyroid axis.

XI. LIGATURE OF THE INNOMINATE.—The innominate has been ligated thirteen times, and with the same result in every case—namely, death. The following is a list of the cases:—

1. MOTT.	death.	hæmorrhage.
2. NORMAN,	"	"
3. GRAEFE,	"	"
4. BLAND,	"	"
5. HALL,	"	"
6. LIZARS,	"	"
7. DUPUYTREN, case }	"	"
mentioned by }		
8. ARENDT,	"	inflammation of lungs, etc.
9. HUTIN,	"	hæmorrhage in 12 hours.
10. BUJALSKI,	"	"
11. BUJALSKI,	"	"
12. MARTIN,	"	"
13. COOPER,	"	"

Kuhl intended to tie the innominate, but after death it was found that the ligation had included both subclavian and carotid three lines beyond their origins; the result was death. I have been unable to obtain records of the 2d, 5th, 7th, 8th, 9th, 10th, 11th, and 12th cases. The causes of death in the 5th, 8th, and 9th were such that they have no particular interest. The others I should have liked to

have obtained in order to make the subject more complete, but it is really of little moment, as they all died of hæmorrhage, and that hæmorrhage must have come from either the distal or proximal side of the ligation; it makes little difference which, as ample reasons can, I think, be given why ligation of the innominate alone will never be likely to succeed. The five other cases are as follows:—

MOTT (*Mott's Velpeau*, Vol. II., p. 306).—This was an aneurism of the subclavian produced by muscular exertion. The innominate was tied half an inch below the bifurcation. On the fourteenth day the ligation separated. On the twenty-third day hæmorrhage (§ xxiv.) occurred. It recurred and carried off the patient on the twenty-sixth day. *Post-mortem*.—For half an inch below the point of ligation there was a coagulum adhering with considerable firmness to one of the sides of the artery. "The tripod of great vessels, consisting of the innominate, subclavian, and carotid arteries, to the extent of nearly an inch, was dissolved and carried away by the ulceration. The extremities of the two latter vessels was found also to open into the cavity of the ulcer." The carotid was almost obliterated by a coagulum. Dr. Mott thought that the fact of the ligation coming away on the fourteenth day, and no hæmorrhage occurring until the twenty-third, proves that it was occasioned by the ulceration.

GRAEFE (*Journal of Graefe and Walther*, t. iii. and iv.).—The details of this case are very meagre. The patient died on the sixty-seventh day, and the post-mortem showed the innominate was plugged up to the point of ligation. No mention is made of the condition of the artery on the distal side, though as the patient died of hæmorrhage we may pretty certainly conclude that it came from there.

BLAND (*Amer. Jour. Med. Sci.*, No. 22, p. 509).—The ligation was applied close to the bifurcation. Hæmorrhage occurred on the seventeenth day, and the patient died from its recurrence on the eighteenth day. The post-mortem showed that the ligation had not quite ulcerated through. The carotid was closed throughout its entire extent by solid coagula. Two-thirds of the innominate below the ligation had been closed by a solid coagulum adhering to its walls. The subclavian was still pervious from its origin up to the tumor.

LIZARS (*Lancet*, June, 1837, p. 600).—In this case the patient died on the twenty-first day from hæmorrhage. The innominate, from its origin up to the point of ligation, was filled with a firm clot. The carotid was also filled. The subclavian was pervious.

COOPER (*Amer. Jour. Med. Sci.*, 1858).—In this case the patient died from other causes than hæmorrhage. The condition of the arteries is not given. In analysing these cases the two points to be considered are, first, proximal clot; second, distal clot.

Proximal clot.—In three the innominate was impervious between its origin and the point of ligation. In one the condition is doubtful, and in the other not stated.

Distal clots.—*Subclavian*.—In three no clot had formed; in the other two the condition is not stated. *Carotid*.—In two it was obliterated, and in a third it was partially so; in the others not stated. In looking at these cases the source of hæmorrhage and consequent cause of failure is obvious. It came from the distal side of the ligation, and especially from the subclavian. Mr. Quain has found that in 219 cases the length of the innominate was as follows:—

1 inch and under,	8
Above 1, not exceeding 1½,	105
Above 1½, not exceeding 2,	90
Above 2,	16—219.

It is thus seen that in the majority of cases the artery is not more than 1½ inches between its origin and point of bifurcation. What now would be supposed to be the result of ligation of an artery so short, and at the same time situated so near two currents of blood—viz. that through the aorta, and that which would pass from the carotid into the subclavian? Fatal hæmorrhage, coming

either from the distal or the proximal side of the ligature, according to its seat. If the ligature be placed near the origin, it would be impossible for a clot to form on its proximal side, owing to the full current of blood passing through the aorta, though there *might* be one on the distal side. On the other hand, if it were placed near the point of bifurcation, though a clot would in all probability be formed on the proximal side, as happened in three of the cases before cited, and nearly in a fourth, none would be formed on the distal side, more especially in the subclavian, for in two of the cases, and nearly in a third, the carotid was obliterated. The reason of this is, that no branches arise from the carotid for four or five inches after its origin, while the subclavian gives off branches very soon after, and ligature of the innominate would necessitate great increase in the size of these in order to maintain the collateral circulation. Even then, if the extension of inflammation should be sufficient to obliterate the carotid, it would have no effect upon the subclavian.

The third place where a ligature might be placed is midway between the point of origin and that of bifurcation. In this case there would be a very great chance of neither a proximal nor a distal clot being formed. It allows only half an inch to three-fourths of an inch on either side of the ligature, a space too small to render the formation of clots at all probable in an artery so large as the innominate. It is thus seen that in whatever situation a ligature be placed, secondary hæmorrhage will almost inevitably occur, and probably from the distal side, because a ligature could not, without very great difficulty, be applied much below the bifurcation, and hence there would be sufficient space for a proximal, but not for a distal clot. The question now arises—Supposing ligature of the innominate were a perfectly successful operation, would it arrest the progress of the aneurism? I think not. There would still be the branches arising from the subclavian to keep up a circulation through the tumor, sufficient in all probability to prevent its consolidation. Of these the vertebral, owing to its size and very free anastomosis through the circle of Willis, would be the most effectual. The inf. thyroid, on account of its connexion with the sup. thyroid, together with the other branches of the thyroid axis, as well as the mammary and sup. intercostal, would all act as preventing causes. Though the size of the tumor might remain stationary, or even diminish for a short time, it would increase as soon as the collateral circulation became pretty well established, which never takes very long.

REPORT OF

TWO CASES OCCURRING AT THE DEPOT HOSPITAL, CITY POINT, VA.

By J. F. RAUB, M.D.,

ACTING ASSISTANT SURGEON, U.S.A.

CASE I.—Priv. Chas. Wagner, Co. H, 93d Pa. Vols., was admitted July 10, 1864, in Ward F, 6th Corps, Dépôt Hospital, at City Point, Va., with chronic dysentery; having had, as I learned, typhoid fever before he came to the hospital. I gave him opii et acet. plumb. in connexion with stimulants. Under this treatment he seemed to improve till July 13th, 1864, when he presented all the symptoms of peritonitis, while at the same time a large tumor was perceptible in the right lumbar region. Gave opiate internally and applied sinapism to abdomen, which relieved him considerably. At eleven p.m., July 13th, no pulse was perceptible at the wrist; the surface was covered with a cold clammy sweat, and breathing was stertorous. At four a.m., July 14th, commenced with stercoraceous vomiting, which continued till six a.m. Patient died at half-past seven a.m. of that day. I was requested by the surgeon in charge to make an autopsy, which I did, assisted by Act. Asst. Surgs. Sanders and Rose. Found the pleura-pulmonalis adherent to the pleura-costalis at several places; and also found a few tubercles in the right lung. On opening the abdominal cavity

we found the peritoneum in a state of congestion and some thickening. The intestines, one coil tied or adherent to the other by bands of adhesion, and in the ascending colon near its junction with the transverse, was a perforation through which coagulated blood, mucus, and fecal matter had passed into the abdominal cavity. The perforation was so extensive as to include half the circumference of the colon. The whole colon and cæcum were studded with ulcers, and three times their natural thickness. The appendix vermiformis was adherent throughout its whole length to the small intestines.

CASE II.—Priv. Koch, Co. —, — Regt., was admitted July 10. When he was admitted he had diarrhœa, but very slight. The most remarkable feature in his case was a tremor of his whole body. His chin and lips trembled so that he was unable to give an answer to any question asked him. He continued growing worse in spite of all we could do for him. He would jump up from his bed exclaiming that he did not wish to fight, that he could shoot no one, and that he desired to go home. As the nurses were dressing the wounds of another man just opposite, on the morning of the twelfth, he jumped up and started to get out of the ward. One of the nurses caught him and laid him back on his bed, and ten minutes after he was a corpse. A few days after I saw the Orderly Sergeant of the battery to which he belonged, who gave me the following history: The battle of Petersburg was Koch's first. As soon as the first gun was fired he became uncontrollable, and begged and prayed to be allowed to go to the rear. The Captain threatened to tie him to the cannon if he did not go to his post. This only tended to make him worse. They feared he was becoming insane, and sent him to the Division Hospital, whence he was sent here. He had this tremor from the time that he first arrived at the Division Hospital till he was sent to this place.

Was not this a case of death from fright?

CITY POINT, VA., JULY 18, 1864.

Progress of Medical Science.

STATISTICS OF AMPUTATIONS.—Being an account of the amputations performed at St. Bartholomew's Hospital from January 1st, 1853, to October 1st, 1863, by George W. Callender, Esq.—These amputations were so arranged in a series of tables as to show for a number of consecutive years the totals of deaths and of recoveries in male and female patients. The operations comprised all the principal amputations, arranged as primary and secondary, and as amputations for disease. After some general remarks, certain deductions from the several tables were detailed.

Of 93 primary amputations, 78 recovered and 15 died. Thus 16·1 per cent of all these amputations proved fatal, or 1 in 6·2; and if the age of the fatal cases, which averages 47 years, be taken into consideration, it appeared for children and for adults under 40, that an unfavorable result after these amputations was an exceptional occurrence. The secondary amputations numbered 37, and of these 24 recovered and 13 died; so that 35·1 per cent., or 1 in 2·8 of all these operations, proved fatal. Taking primary and secondary amputations together, 7·1 per cent. of those of the upper extremity, and 32·4 of those of the lower extremity, proved fatal; and 21·5 per cent., 1 in 4·6, of the total of traumatic amputations. There were 228 amputations for disease or for malformations; 182 recovered and 46 died, or 21·1 per cent. Of those performed at the upper extremity, 18·5 per cent. died; whilst of those which involved the lower, 20·3 per cent. ended fatally. It followed that of the total 358 amputations the ratio of mortality was, after all primary amputations, 16·1 per cent.; after all secondary, 35·1; after all amputations for disease,

20.1; after all amputations at the upper extremity, 10.8; after all those at the lower, 23.6; and after amputations, 20.6 per cent.

Causes of Death.—Old people were little able to resist the shock of the more severe amputations, the influence of age being most marked with primary operations. Females did not rally so easily as males after the severe shocks which precede and accompany primary amputations, nor after the depression consequent upon amputation at the thigh. The rate of mortality on the totals of cases was 18.9 per cent. for males and 21.6 per cent. for females. The totals of deaths and of recoveries, as influenced by the age and sex of the patients, were shown in a separate table. After primary amputations, traumatic complications proved fatal at the rate of 40 per cent., and exhaustion at the rate of 20 per cent. of the total number of deaths. After secondary amputations, exhaustion was the chief cause of death, 38.4 per cent. sinking in this way; 23 per cent. died from secondary hæmorrhage. Of the total of traumatic amputations ending fatally, 28.5 per cent. sank from exhaustion, 25 per cent. from traumatic complications, 21.4 per cent. from hæmorrhage, and 7.1 per cent. from pyæmia. After amputations for disease ending fatally, exhaustion was the cause of death in 28.2 per cent.; pyæmia in 31.9 per cent.; and visceral complications in 15.2 per cent.

Taking the four chief causes of death after all amputations, the following rates of mortality per cent. in the totals of fatal cases were obtained:

Amputations.	Hæmorrhage.	Pyæmia.	Exhaustion.	Visceral Complication.
Primary.....	20.0	—	20.0	6.6
Secondary.....	23.0	15.3	35.4	15.3
All traumatic.....	21.4	7.1	28.5	10.7
For disease.....	4.3	39.1	28.2	15.2

Of the total 74 fatal cases, 24.3 per cent. died from exhaustion, 27 per cent. from pyæmia, 12.1 per cent. from hæmorrhage, 16.1 per cent. from visceral complications. After giving the particulars of the cause of death in each fatal case, and the injury or the disease for which the operation was performed, the days in which 74 cases terminated fatally are shown in a tabular form. From this it appeared that deaths from shock, or from other injuries, or from both combined, took place within the first twenty-four hours, and within forty-eight hours the deaths from recurrent hæmorrhage occurred. Exhaustion was most fatal about the fourth day; secondary hæmorrhage was a cause of death from the fifth to the twelfth day; pyæmia from the seventh to the twenty-fourth. Three cases of amputation were referred to in which death was not accelerated by the operation, the patients dying on the 109th, the 102d, and the 93d day respectively; and the paper concluded with an account of certain cases, and of certain sequences of fatal cases and recoveries, showing how necessary it is to mass together a considerable number of consecutive operations before we have a chance of arriving at tolerably just conclusions.—*Brit. Med. Jour.*

not fatal severely, and whom we had counted as not lost to the armies, are sooner or later to be numbered among the dead. In a greatly qualified sense our military hospitals are still obnoxious to the reproach of Dr. RUSH:—"Hospitals are the sinks of human life in an army. They robbed the United States of more citizens than the sword." We do not mean to intimate that our military hospitals are sadly defective, for they are, on the whole, models of improved construction. Nor is the management in any special sense open to censure. Able and efficient men are now at the head of these institutions, and the most fastidious observer would find little cause of complaint in a prolonged inspection.

We refer rather to those causes of excessive mortality in hospitals which are inherent in the condition of the wounded when admitted. A medical member of the Sanitary Commission who recently made a very careful inspection of the hospitals at Washington has furnished valuable information and suggestions in relation to the causes of this mortality. He bears his testimony to the great attention given to the wounded. The special care which the stumps, compound fractures, and severe wounds receive, is usually as complete as could be desired. Still the mortality is excessive and from causes which he regards as preventible.

He first mentions excessive exhaustion from long fatigue in transportation, and excessive suppuration, as the chief causes of the excessive mortality. Out of 300 patients from the Pamunkey, at a single hospital, fourteen died within twenty-four hours. There is abundant evidence of inadequate care and subsistence of wounded men during their transportation. Some estimate of the sufferings endured in transportation at the present time, may be formed from a remark made by a surgeon in charge of a hospital. He remarked: "On hearing some of these men speak of their sufferings while being transported from the battle-fields, and in their trans-shipment, I confess I can scarcely restrain myself from weeping." The greatest sufferers are those who have compound fractures of the thigh. The means of support for such fractures are utterly inadequate. Hospital surgeons bear testimony to the needless waste of life, and the terrible increase of suffering, in consequence of the want of adequate means for support and care of thigh fractures, and the severe wounds of the leg and knee. The great importance of improved means of transportation arises from the excess of severe wounds. In a single hospital there were 107 compound fractures of the femur, 42 severe injuries of the knee-joint, and 225 amputated limbs. The Surgeon in charge of this hospital stated that he had seen 45 patients die in hospital in a single day—nearly all from the exhaustion of transportation. The following facts present this subject in, if possible, a still stronger light:—In 20,930 wounds, 749 were compound fractures of femur; and of this number 480 were transported unamputated. Again, of the knee there are 242 wounds, and of these 138 were transported unamputated. Of the leg, there were 948 gunshot fractures, of which 650 remained unamputated. There was at the same time, 566 gunshot wounds in the lungs and thorax. The 1st Division, 6th Corps, in the Wilderness, had 34 compound fractures of the thigh, living, 20 amputations, and 14 transported unamputated. It has been found that any one of these transported fractures must be moved, off and on, (unless the bunk or bed goes with the sufferer), at least fourteen times before resting in a general hospital.

American Medical Times.

SATURDAY, AUGUST 20, 1864.

CAUSES AND PREVENTION OF EXCESSIVE MORTALITY IN MILITARY HOSPITALS.

WE are accustomed to regard the immediate aggregate of losses in great battles as the final result. The number killed we count as a dead loss, but the number wounded we set to the account current of the army. In a limited degree this is a correct method of stating the problem, but in a more important sense it is wide of the truth. If we visit the hospitals we soon find that large numbers with wounds, if

Often the number of movements is much more! Very few of the wounded thighs and knees now and recently brought to Washington, have any supporting appliances.

The second cause of excessive mortality is pyæmia. And this, he remarks, is the greatest source of mortality in the hospitals here. It is found everywhere, and is the greatest source of concern to all intelligent surgeons. In this class of patients the powers of assimilation break down, and unless rallied before the initial chill, all chances of life are lost. Among the best informed surgeons, the opinion prevails that the only preventive measures that can be successfully adopted against this blood-poisoning, etc., which is termed *pyæmia*, must be such as will fortify the wounded man against morbid changes, and give him vigor and appetite, anti-scorbutic and appetizing diet, in short. And this is demanded *in the field, in ambulances, and on transports*, no less than in the General Hospitals. Let fresh vegetables and fruits, and easily assimilated nourishment be always at hand for the wounded if we would hope to diminish the prevalence of pyæmia.

The third cause is *secondary hæmorrhage*. He remarks that the frightful frequency and fatality of this accident are manifestly owing to pathological, or rather to physiological causes, which the best surgery cannot prevent. It results more from low vitality than from any fault of surgeons. The ligated arteries and the clot-plugs in them, in patients dying of secondary hæmorrhage, exhibit the evidences of degeneration, and the failure of reparative processes, simply a result of defective vitality and consequent delay of physiological repair in the wounded and ligated blood-vessel. Whatever we can do to keep up healthy nutrition and the vigor of wounded men before and during their treatment in hospital tends directly to diminish this fearful accident, which by a sudden gush terminates the life of the patient and the fondest hopes of the faithful surgeon.

Finally, tetanus is found daily occurring during the period of low vitality from exhaustion. He says, it is evident that its prevention is peculiarly dependent upon the adequacy and faithfulness of supply from the sanitary stores of the Sanitary Commission. Warm clothing, quilts and bedding, with more care of wounded parts, will diminish the frequency of tetanus among the wounded. The number of cases rapidly diminishes with the general improvement of the wounds. A certain percentage of cases of tetanus among such severe wounds may be inevitable, but the cold current of damp air, the exposure of the back, uncovered during transportation and in the ward; the want of sleep and want of digestive power, are among the conditions that the supplies and agencies of the Sanitary Commission most directly reach.

The remedies for these evils are thus stated:—

1st. Improvement of the diet of the patients on the field, in transports, and in hospitals.

2d. Special means for improving the local atmosphere of the wards, etc., in hospitals.

3d. The establishment of hospitals at higher altitudes and in healthier localities.

4th. By supplying more adequate material aid to the surgeons in the field for the support and care of fractured bones.

SANITARY SCIENCE IN UNIVERSITIES.

It would scarcely seem necessary to attempt to prove the importance of introducing into the curriculum of studies in

our universities a branch which taught the student how to preserve his health. The meanest intellect can comprehend the value of health, and yet no subject is less understood. The greatest scholar neglects this branch of knowledge. There are at length, we are glad to notice, some evidences of an awakening interest in the all-important science of hygiene. Amherst College has its professor of gymnastics, and the effect of his training is seen in a more stalwart, vigorous, and manly class of graduates. The University of Michigan is also moving in the right direction. It has established a course of instruction in Hygiene in the Department of Literature, Science, and the Arts; and Prof. PALMER, of the Medical Department, has furnished a syllabus of such a course. It embraces the following heads: Personal Hygiene; Laws of the Relation of Sex; Infant Mortality; Mental, Domestic, Public, and Military Hygiene. We hope other seminaries of learning will follow the example, and establish special courses of instruction in sanitary science. We heartily endorse this sentiment:

"If every graduating class in the University can go out properly instructed in the great art of preserving the individual and the public health, it cannot be long before a benefit will be felt and appreciated by the public, scarcely second to that resulting from its literary teachings."

REVACCINATION IN THE NAVY.

IN a recent issue we noticed some remarks of Mr. MARSON, before the London Epidemiological Society, on the neglect of revaccination in the Army and Navy. In regard to our own Navy the remark is not true. Every effort is made to secure the complete protection of sailors by careful vaccination and revaccination. The following circular issued from the Bureau of Medicine and Surgery, Dec. 31, 1861, by W. WHELAN, Chief of Bureau, shows the degree of care exercised by this department to fully protect the Navy from small-pox.

"It is directed, as a precautionary measure, that all recruits be vaccinated as soon as possible after joining the receiving ship.

"A register will be kept of such cases, with notice of results, especially in such instances as present unmistakable evidence of successful revaccination after small-pox.

"It will also be noticed, whenever the revaccination succeeds, where well-marked cicatrices attest the former success of the same process.

"A quarterly report will be made to the Bureau, embodying the features indicated."

SUCCESSFUL LIGATURE OF THE INNOMINATA.

WITHIN six years of half a century ago Dr. MORT first performed that most daring and brilliant operation, the ligation of the arteria innominata—an operation which, though he does not himself consider it the most difficult that he has executed, had added more largely than any or all others to his great reputation. His patient so far recovered as to be able to walk about, but finally succumbed to successive hæmorrhages on the twenty-sixth day. The operation has been repeated thirteen times since, but with an invariably fatal issue. DR. MORT has, we believe, never doubted the final success of the operation, and has often expressed his desire to live to witness the consummation of his hopes. The boon has been granted him, and in another column we have the pleasure of recording his expressions of satisfaction and delight at the successful issue of the case reported by DR. ROGERS. The correspondence is full of interest.

Reviews.

LECTURES ON ORTHOPÆDIC SURGERY, delivered at the Brooklyn Medical and Surgical Institute, with numerous illustrations. By LOUIS BAUER, M.D., M.R.C.S. Eng., Prof. Anatomy and Clinical Surgery, etc., etc. (Reprinted from the Philadelphia Medical and Surgical Reporter.) Philadelphia: Lindsay and Blakiston, 1864. Pp. 108.

In this work DR. BAUER gives the results of his large and varied experience in orthopædic* surgery. Probably no surgeon in this country has given to this subject an equal amount of study with the author, or had greater opportunities for correct observation. He had early enjoyed rare facilities for the investigation of this and allied branches of theoretical and practical surgery, and since his residence in this country the field of observation has been almost unbounded. In this field he has labored with great diligence and with marked success. The need of a well written systematic treatise on orthopædic surgery is too patent to require proof. We have no American literature on this specialty worthy of notice.

In the introduction DR. BAUER gives an historical sketch of orthopædic surgery, and discusses at some length the nature of deformities. The practical portions of the volume are divided as follows:—I. Deformities of the Feet; II. Deformities of the Knee-Joint; III. Deformities of the Hip-Joint; IV. Deformities of the Spine; V. Deformities of the Neck. We shall not pass these several sections in critical review, but will endeavor to point out some of the leading features of the work.

DR. BAUER is of the opinion that almost all deformities of the body are of a consecutive character; the bones are passive agents following the traction of the muscles; and these, in turn, are subservient to the nervous system, which merely reflects morbid changes. Diseases of the joints are one of the most fertile sources of deformities, not from ankylosis or displacements, but on account of the permanent contraction of muscles which ensues. This contraction is the result of the reflex action of the spinal cord. The consecutive order of symptoms in articular diseases is as follows:—*First*, attenuation of the extremity; *second*, general coolness of the member; *third*, a peculiar pain, which is periodic, intermittent, and nocturnal; *fourth*, muscular contractions. The latter culminates in a series of reflex actions of the spinal cord, in the sensitive, motor, and nutritive spheres of that organ. In this brief summary we have embodied the latest views of the best writers on orthopædic surgery. The old notions of the changed relations of the bones, and wasting of muscles from long continued rest, etc., are discarded, and we trust for ever. From the more rational explanation of many of these phenomena by the deranged function of the nerves, and the subsequent changes in the muscles, has arisen a more rational and satisfactory method of treatment. All students of orthopædia should be thoroughly grounded in these first principles of the art, as set forth in the first section of Dr. Bauer's work, and to this we refer them.

In the section on Deformities of the Feet Dr. B. also rejects the prevailing theories as to the causes of congenital and acquired talipes varus, and attributes it to defective innervation. The tibial nerve is alone involved. Talipes valgus, he remarks, occurs in 90 per cent. during the period of dentition, and it is now very generally conceded that affections of the spinal nerves are very common at this time. This deformity may be due, however, to diseases of the tarsal and tibio-tarsal articulations. In the treatment of deformities of the feet the author lays down the following rules:—1. The removal of muscular impediment. 2. The

reposition of the tarsal bones to their normal location. 3. The re-establishment of the motor power. 4. The promotion of nutrition, growth, and development of the affected extremity. These are rational rules and cover the whole field of treatment. If there is one rule which* should be more emphatically stated it is the latter. Surgeons too frequently occupy themselves exclusively with the mere mechanical treatment, and lose sight of the indications which the wasted and half nourished muscles present. Myotomy and tenotomy are discussed at length, and the various apparatus employed are figured.

In the section on Deformities of the Knee-Joint Dr. B. brings forward some of the later views in regard to the treatment of inflammations and fibrous ankyloses of that joint by extension. He is a warm advocate of brisement forcée, and gives rules for employing it. We find here a section on Malposition of the Knee-Joint from Bursal Distension, which presents some novel views. In one case he operated by puncturing a subcutaneous bursa, and restored the limb to a straight position.

In the articles on Deformities of the Hip-Joint and Spine, DR. BAUER vigorously combats the prevailing theory of the scrofulous origin of the diseases which tend to these deformities. The initial step in hip-joint disease is inflammation of the investments of the ligamentum teres, and this is followed by inflammation of the synovial lining of the articulation. The ligamentum teres is thus soon destroyed and caries of the head of the femur follows. Inflammation of the cancellated structure is, according to Dr. Bauer's experience, very rare, and the same is true of the cartilage; both are finally implicated in the general process of destruction. In deformities of the spine he also attributes the primary act to inflammation. He says, "There is not one solitary symptom or morbid change connected with the so-called Pott's disease that could not be brought in accordance with osteitis and its phases. Thus, for instance, a vertebral body may be softened down by inflammatory effusion or fatty metamorphosis, may change its form through the superincumbent weight, giving rise to a gibbus of greater or less size, and then the disease may be arrested without proceeding to the formation of an abscess; or purulent infiltration and caries may ensue." DR. BAUER sustains his views by quotations from eminent authors. VIRCHOW asserts that he has never seen the so-called tubercular cell, and that in the material hitherto pronounced tubercular, he has failed to recognise anything specific outside of the casual results of the inflammatory process. GUELTI, in his extensive researches, failed to detect tubercle in the inflammatory processes in bone. It cannot be denied that the views of DR. BAUER have produced a most decided change in the treatment of the diseases of the hip and spine, both in their acute and chronic stages. The great principle of rest and the removal of local irritation has been fully adopted in the place of issues, salves, etc. The result of this change is most beneficial. Hip-joint disease, in its early stage, is now recognised as curable by agencies which are neither painful nor exhaustive.

The sections on the deformities of the hip-joint and spine will be regarded as the most interesting portion of the work. They are very full in the illustrations of the modern methods of treating the diseases which tend to deformities, and of the deformities which thus occur. The last section consists of a short notice of the neck; this we shall pass without comment.

In taking leave of DR. BAUER's work we have to express the pleasure which we have derived from its perusal. Few works have afforded an equal amount of instruction. We unhesitatingly pronounce it one of the most complete and practical surgical treatises that has issued from the American press in a decade. Valuable as is the scientific and literary character of this work it has one serious drawback, and that, we fear, will prove sufficiently formidable to drive it from the market. We allude, of course, to the wretched style of publication and illustration. Small and imperfect print, poor and dirty paper, double columns, coarse and

* We write orthopædic (*oe* not *ae*), as we admit neither Dr. Bauer's nor the generally received derivation. This branch of surgery took its name from the cure of deformities in which its efforts were at first confined, viz. the foot, and the name is derived from *ortho*, straight, and *pod*, a foot.

blotched woodcuts, etc., are obstacles to success which no work can or ought to surmount. We advise DR. BAUER, in good faith, to reproduce his monograph in a form worthy of acceptance by the profession, and its success will be assured.

Correspondence.

CASE OF SUCCESSFUL LIGATION OF THE INNOMINATA.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR—I cannot express to you the gratification I feel in inclosing you this letter. It is a copy of one in my possession, from my old and distinguished pupil Dr. David L. Rogers, now of the Army of the United States, dated New Orleans, July 31, 1864.

I have expressed myself to my class for many years past, that I would like to live long enough to see the Innominata successfully tied for aneurism. For this surgical achievement I am more than gratified—I am delighted.

On the brow of Dr. A. W. Smith, of New Orleans, will always rest the laurel of the first successful operation of ligation of this great artery. Time never can rob him of this surgical achievement.

To Dr. Rogers we no doubt are indebted for the cardiac operation upon the innominata in this case, rather than the distal upon the third division of the subclavian. Dr. R.'s original idea was carried out in this case, which I have long since recommended, and intended to use, should another case have presented itself to me. (See Dr. Rogers's Surg. Essays.)

The subsequent hæmorrhage being completely arrested by a ligation of the right vertebral is confirmatory of the correctness of this idea.

On the 9th instant as I was about to answer his letter, Dr. Rogers called upon me (having arrived the day before from New Orleans), and stated that the aneurismal tumor had entirely disappeared, that the wound had healed, and that the man was well and walking about.

Yours &c., V. MOTT.

NEW YORK, August 16, 1864.
1 Gramercy Park.

The following is DR. ROGERS's letter to DR. MOTT:

NEW ORLEANS, July 31, 1864.

SIR—To you, the originator of the operation for ligating the arteria innominata, is due the first notice of its success.

Permit me to offer you my sincere congratulations, that after so many failures you have been spared to enjoy a triumph in verifying the noblest conception in operative surgery.

I beg to offer a brief history of the case, as presented on the 9th of May last, in the Charity Hospital of this city. I received an invitation from Dr. A. W. Smith, the able Surgeon of that Institution, to witness the ligation of the subclavian artery upon the distal side of an aneurismal sac. The subject was a mulatto man of 33 years of age. The tumor was large, with a strong pulsation. Being satisfied, for reasons which it is not necessary to mention, that the operation proposed would certainly fail, I urged upon Dr. Smith, and those present, that the prospect of success would be much greater by applying the ligature to the arteria innominata and the carotid artery at the same time, as proposed by me in 1849. (See Surgical Essays, page 45.) After some discussion it was concluded to postpone the operation for some days.

On the 15th Dr. Smith informed me, that he had concluded to perform the operation as proposed by me. In the presence of several civil and military surgeons he performed the operation agreeably to your direction, and applied a ligature to the arteria innominata and to the right carotid about one inch above its origin. The wound was dressed in the usual manner, and the man removed to bed.

May 28th. The ligature came from the carotid artery.

May 29th. Hæmorrhage from the wound, but arrested by slight pressure.

30th and 31st. The hæmorrhage returned.

June 1st. The hæmorrhage returning. Dr. Smith removed the lint, and filled the wound with small shot.

June 2d. Ligature separated from the arteria innominata.

June 17th. A part of the shot removed from the wound, followed in a few hours by hæmorrhage. The shot returned.

July 5th and 8th. Hæmorrhage returned.

Believing the hæmorrhage must be supplied by the vertebral artery, through the subclavian, it was determined to ligate the artery, and accordingly Dr. Smith secured the vertebral artery on the 9th of July.

July 19th. No return of hæmorrhage. The ligature separated from the vertebral artery this day. A doubtful pulsation may be felt in the right radial artery. The aneurismal tumor has disappeared.

July 30th. General health much improved since the last report. The wound is nearly closed. He walks about the ward, and is desirous of returning to his home. We have every reason to believe that the operation is in every respect a success.

With great respect,

Your humble servant,

D. L. ROGERS.

DISLOYALTY OF THE PRESIDENT OF THE AMERICAN MEDICAL ASSOCIATION.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR—I take no interest in the controversy in regard to the loyalty of the President of the American Medical Association, but I cannot forbear sending you the following item, so imperatively demanded by CONSERVATOR. He must admit that this is one fact on which the grave accusation rests. In the Chicago correspondence of the N. Y. *Daily Times*, June 27th, 1864, occurs the following paragraph:

"CHICAGO, Monday, June 20, 1864.

"Our democratic friends have been in convention at Springfield during the past week * * * * The peace element prevailed, as one of the electors at large is Dr. N. S. Danes of this city, who in a public speech some months ago 'thanked God that disease and battle were depleting our arms to such an extent, that the tyrant Lincoln would soon be powerless to wage war upon the rights and institutions of the South.'"

Yours, &c., J. S.

August 1, 1864.

Army and Navy.

CIRCULAR NO. 1.

HEADQUARTERS MILITARY DIVISION OF WEST MISSISSIPPI,
OFFICE OF THE MEDICAL INSPECTOR AND CHIEF MEDICAL OFFICER,
NEW ORLEANS, July 27, 1864.

I. It is hereby announced, for the information of Medical Officers in the Military Division of West Mississippi, that the Chief Medical Officers of Departments, Armies, and Army Corps, alone, can hereafter be styled *Medical Directors*. Officers having the control of the medical affairs of any command less than an Army Corps, of a Division of an Army, or a Military District, will be styled *Surgeon in charge*.

The Senior Surgeon of a Military Post will be styled *Post Surgeon*. The military designations should always be inscribed above these titles.

II. The Medical Directors of the Departments of the Gulf and Arkansas, will transmit their papers through this office, except those that may be required to go direct to the Surgeon-General's Office.

III. The Medical Directors of all of the Departments in the Military Division of West Mississippi, and the Surgeons in charge of the Military Districts of West Tennessee, Vicksburg, and Natchez, will furnish for the use of this office, copies of the Monthly Return of Medical Officers, accompanied with a statement of the Regiments in which vacancies exist, with a list of Hospital Stewards, and where serving.

IV. Surgeon in charge of Hospitals in the Military Divisions of West Mississippi will furnish this office with a copy of their Weekly Report, with brief remarks upon the prevailing diseases, and the treatment adopted; epidemic and contagious diseases; and vaccinations. The number of laundresses, laborers, and contrabands should be given.

Medical Directors of Departments, Surgeons in charge of Military Districts, and Post Surgeons in the Military Division of West Mississippi, will furnish a semi-monthly consolidation of their Weekly Report, the designations and the details for the various headings of the Report to be mentioned, for each Regiment and Battery.

When the commands are large enough, this consolidation will be made by Divisions.

V. Hospital Registers very often show merely the diseases with which patients enter the Hospital, and omit altogether the subsequent diseases they may have had while there. Such omissions render the Reports of Sick and Wounded false, as likewise all calculations and statistics based upon them. Hereafter the diagnosis upon the bed cards and the Register will be changed, so as to account for every disease each patient suffers, while in Hospital. If a patient have intermittent fever, gonorrhea, and diarrhoea during any one month, they should all be set down against his name, and entered on the Register, as so many cases of disease.

VI. In order to ensure the thorough application of, and obedience to the various orders, regulations, and instructions, that have been promulgated to enforce the proper administration and working of the Medical Department; and as a means of keeping Medical Directors frequently informed, as to the efficiency and sufficiency of Medical Officers; the condition of supplies; the sick and death rates; and the sanitary condition of the troops; the prevailing diseases, their causes, and the means to be adopted for their prevention and relief; and all other matters, the knowledge of which may tend to elevate the standard of health, and increase the power of the troops, Medical Directors will cause careful inspections to be made of the troops, posts, camps, and Hospitals under their control. This duty will be performed by all Medical Officers, who will be detailed in turn for this, in addition to their other duties, in the same way that line officers are detailed as officers of the day. Medical Officers belonging to a Division, or smaller command, should rotate with each other in their inspections; and those in charge of Hospitals, when they are situated in groups, should do likewise. Reports of these inspections will be made semi-monthly; and will only cover as much ground as can be conveniently and easily inspected within the above period. Haste in this duty should be avoided. After the Medical Directors of Departments have received these reports, through the usual channels, and endorsed their action upon them, the most critical and instructive of them will be forwarded to this office.

It is not intended by this arrangement to impose more labor upon Medical Officers than they can conveniently perform; and it is confidently believed, that by thus varying their duties, enlarging their sphere of observation, and affording opportunities for a free interchange of experience, they will become mutually instructed; and by necessity, become more familiar with orders, circulars and the usages of service. This order will be sufficient authority for the performance of the above duties.

VII. Medical Directors will endeavor, as much as possible, to economize Medical Officers, by breaking up all unnecessary, so-called Medical Directorships and Superintendencies of Hospitals, which quite often are of no service, and simply duplicate the labor of the next office above them, and occasion a waste of time, clerical labor, and stationery.

By order of Major-General E. R. S. Canby:

EDW. P. VOLLUM,
Lieut. Colonel, and Medical Inspector U. S. Army,
Chief Medical Officer.

GENERAL ORDERS, NO. 88.

HEADQUARTERS DEPARTMENT OF VIRGINIA AND NORTH CAROLINA,
FORT MONROE, VA., July 31, 1864.

The "Hampton" and "Chesapeake" General Hospitals are hereby consolidated, and will hereafter be known as the "United States General Hospital, Fortress Monroe."

By command of Major-General B. F. Butler:

R. S. DAVIS,
Major and Assist. Adjutant-General.

GENERAL ORDERS, NO. 108.

HEADQUARTERS DEPARTMENT OF THE SOUTH,
HILTON HEAD, S. C., July 14, 1864.

As a Sanitary measure, and to counteract the effects of malarial on the troops in this Department, during the warm months, whiskey, with quinine, in prophylactic doses, will be issued to the enlisted men, particularly those on duty in Districts especially malarious or on excessive fatigue duty, only on the recommendation of the Senior Medical Officer of the District, approved by the District Commander, at such times and in such quantities as the Medical Officer shall deem it necessary to keep the command in a healthy and active condition. Ordinary fatigue duty does not justify the issue of whiskey, which will be discontinued in future, except in the manner prescribed.

All orders or parts of orders heretofore issued from these Headquarters, which conflict with the above, are hereby rescinded.

By Command of Major-General J. G. Foster,

W. L. M. BURGER,
Assist. Adjutant-General.

ARMY.

ORDERS, CHANGES, &c.

APPOINTMENTS.

Dr. Alonzo M. Barnes, of Pennsylvania, to be Surgeon, 39th Regiment U. S. Colored Troops.

G. B. Phelps, G. H. Burnham, C. B. Braman, and J. F. Bardett, of Massachusetts, W. J. Berry of Pennsylvania, S. J. Scammell of Rhode Island, W. H. Boyer of Ohio, J. S. Craig, of New Hampshire, H. H. A. Beach of Connecticut, W. A. Anderson, D. G. Dixon and F. E. Storm, of Washington, D.C., to be Hospital Stewards, U. S. Army.

RESIGNED.

Surgeon Charles L. Allen, U. S. Vols., August 5, 1864.

COMMISSIONS REVOKED.

George P. De Grassi, as Assistant-Surgeon of Volunteers, he having declined appointment as such.

J. W. Archer, of Pennsylvania, as Hospital Chaplain U.S.A., by direction of the President.

DISCHARGES, DISMISSALS, ETC.

Hospital Steward Charles Gaylord, U.S.A., honorably discharged to enable him to accept an appointment as Acting Assist.-Surgeon, U. S. Navy.

Hospital Chaplain L. K. Berridge, U.S.A., mustered out by direction of the President.

So much of Special Orders, No. 208, current series, Headquarters, Dept. of Va. and N. C., as mustered Assistant-Surgeon H. W. Willoughby, 1st U. S. Colored Troops, out of the military service of the United States with loss of all pay and allowances now due him, on account of physical disability caused by the intemperate use of whiskey and opium; and so much of General Field Orders, No. 4, July 22, 1864, from the Headquarters, Department and Army of the Tennessee, as dismissed with loss of all pay and allowances, Assistant-Surgeon S. A. Grimes, 32d Ohio Volunteers, for straggling from his command, being captured and giving important information to the enemy, have been confirmed by direction of the President.

LEAVE OF ABSENCE.

Assistant-Surgeon P. S. Connor, U.S.A., for twenty days.

Surgeon John Bradley, U.S.V., for twenty days.

Surgeon John McNulty, U.S.V., for two months.

Surgeon W. D. Stewart, U.S.V., for fifteen days.

Hospital Chaplain H. C. Hemies, U.S.A., for thirty days.

Surgeon Thomas B. Reed, U.S.V., for twenty days.

Surgeon L. P. Woods, 5th New York Cavalry, for ten days.

Surgeon Henry Palmer, U.S.V., for sixty days.

Surgeon David Stanton, U.S.V., for fifteen days.

ORDERS.

Surgeon W. D. Stewart, U.S.V., is relieved from duty in the Dept. of West Virginia, and will report to the Provost-Marshal-General for duty.

Assistant-Surgeon Phineas S. Connor, U.S.A., is relieved from duty in the Dept. of the Gulf and will remain on duty with the Batteries with which he is now serving.

Assistant-Surgeon John S. McGrew, U.S.V., will report to Assistant-Surgeon-General R. C. Wood, U.S.A., at Louisville, Ky., for assignment to duty.

Surgeon S. B. Davis, U.S.V., is relieved from duty as Acting Medical Inspector, Dept. of Kansas, and will report in person to Major-General Blunt, Commanding District of Upper Arkansas, for assignment to duty.

ASSIGNMENTS.

Assistant-Surgeon W. R. Ramsey, U.S.A., as Acting Medical Inspector, Department of the South.

Surgeon H. C. Hendrick, 157th Pa. Vols., as member of the Army Medical Board, Hilton Head, S. C.

Acting Assistant-Surgeon A. M. Shew, U.S.A., as Examining Surgeon of Recruits, Hilton Head, S. C.

Surgeon D. J. McKibbin, U.S.V., as member of Board for examination of enlisted men in hospitals in and about Philadelphia, Pa., for transfer to the Veteran Reserve Corps.

Surgeon C. B. White, U.S.V., as Medical Director of General Gordon Granger's command.

Assistant-Surgeon Benjamin Durham, U.S.V., to the St. James General Hospital, New Orleans, La.

Assistant-Surgeon J. B. Petherbridge, U.S.V., to the Marine General Hospital, New Orleans, La.

Surgeon W. H. Gohrecht, U.S.V., as Treasurer of Officers' Hospital, Cincinnati, Ohio.

Acting Assistant-Surgeon J. H. Frizell, U.S.A., as Examining Surgeon, Colored Recruits, Louisville, Ky.

Assistant-Surgeon R. B. Brown, U.S.V., to Artillery Brigade, 18th Corps, Army of the Potomac.

Assistant-Surgeon H. W. Davis, U.S.V., to Paducah, Ky.

Assistant-Surgeon Rudolf Tauszky, U.S.V., as Attending Surgeon, Fort McKae, N. M.

Surgeon N. P. Rico, U.S.V., as Surgeon in charge Hammond Hospital, Beaufort, N. C.

Surgeon John M. Robinson, U.S.V., as Medical Director, 2d Infantry Division, Department of West Virginia.

Assistant-Surgeon John W. Fitzer, U.S.A., to Jefferson General Hospital, Jeffersonville, Ky.

Assistant-Surgeon F. Wolf, U.S.V., to Artillery Brigade, 2d Corps, Army of the Potomac.

Surgeon F. Meacham, U.S.V., to General Field Hospital, Army of the Ohio, Marietta, Ga.

Surgeon G. F. French, U.S.V., as Surgeon in charge 2d Division, General Hospital, Rome, Ga.

Surgeon R. M. S. Jackson, U.S.V., as Surgeon in charge, General Hospital, No. 8, Lookout Mountain, Chattanooga, Tenn.

Original Lectures.

CLINICAL LECTURE

ON DIPHTHERIA.

By JOHN T. METCALFE, M.D.,

PROF. PRACTICE OF MEDICINE, UNIVERSITY MEDICAL COLLEGE.

LECTURE II.

I HAVE said* that, as a rule, the paralysis following diphtheria is prone, by its natural history, to terminate in cure. This we may confirm and expedite by the use of digestible, nutritious food, by the administration of tonics, by friction and kneading of the paralysed parts when practicable, and, occasionally, by the aid of the galvano-electric current. It is well understood that pure air and proper exposure to sunlight are not to be omitted.

I think highly, among the tonic remedies, of the syrup of the phosphates, or what it has been fashionable with some to call chemical food. It is readily taken, agrees well with the stomach, and gives us all the results we should, *à priori*, expect from its composition.

Among tonics of the vegetable class, I prefer strychnia to any other. I do not know that it is better than nux vomica in itself; but the invariable composition of the pure alkaloid or its salts enables us to regulate the dose with perfect accuracy.

I usually write for

Strychniæ, gr. j.
Acid. Nitric. Dilut. f. ʒj.
Aquæ f. ʒviij.

M.

Each minim of this solution contains the one-four-hundred-and-eightieth part of a grain of the salt. To a child of three years I would give from three to five drops in a dessertspoonful of water, three times a day.

The beneficial effects from change of air and sea-baths are not less strongly marked in convalescence from diphtherial paralysis than from other adynamic conditions.

The treatment I have thus indicated, gentlemen, is not complicated. It is easy to remember, and I believe embraces nearly everything that is essentially necessary.

As this lecture is intended to anticipate certain questions from you, after graduating, concerning diphtheria, which I would otherwise have put to me by letter, it may not be amiss to say what should be done with regard to your conduct at the breaking out of an epidemic.

You will at once be asked as to the cause of the visitation. There is scarcely anything on which the non-professional public insist more strongly, than that a doctor should be able to explain the reason why such epidemics prevail. Honesty is the best policy in such cases. Say what is true, "I don't know." Avoid the unwholesome practice of telling people that it is owing to an animal having been drowned in some neighboring pond, from which water is supplied; that it is because the flour or other bread-making material was bad; that the wind blew from some particular quarter; that foolish virgins had put bad oil in their lamps by which the patients read or worked, or the like. We are in ignorance, thus far, of the cause which calls into existence most epidemic diseases. Let us, whilst confessing our darkness, strive and hope for light. As yet it has not been willing to shine on us in such a way as to let us see the reason of diphtherial visitations.

Every one who has had much dealing with diphtheria will recognise the practical wisdom of Dr. William Jenner's division of the disease. It is as follows:—

1st. The mild form, in which there is little or no constitutional disturbance, with little or no trouble or pain in swallowing. Albumen is not found in the urine of these cases, which are recognised as diphtherial, by the epidemic

prevalence of the disease, and by the patches of exudation revealed by inspection of the fauces or other parts affected.

2d. The inflammatory form. In this, symptoms and signs of more or less severe facial inflammation precede the membranous development; intense injection of the sub-mucous cellular tissue, producing, at times, marked œdema. Febrile action, with great quickness of pulse, is a constant accompaniment of this form.

Doctor Jenner also speaks of the nasal, the laryngeal, the asthenic, and the insidious varieties. They are due simply to certain peculiarities, explicable by their names, and need not detain us longer in their consideration. They will be mentioned again when we come to speak of prognosis. A question which you must be prepared to answer from your patients is, "Doctor, shall I separate the sick child?" (for it occurs so much more commonly in children) "from those who are well? Is the disease contagious?"

The usual dissidence among authors as to its contagious nature exists. I advise you very strongly, where it is practicable, to isolate the sick member of the family, and to encourage the removal of the others to some place where the disease does not prevail. If we could be sure that the individual instance was entirely sporadic, it might be proper to give other advice; but, unfortunately, we have too much evidence of its tendency to desolate certain localities, to be able to regard it as otherwise than of epidemic type. You would not hesitate to advise the removal of well people from New Orleans during a visitation of yellow fever, nor from New York whilst cholera prevailed. No more should you hesitate to advise your patients to take their healthy children away from a neighborhood scourged by diphtheria. Setting aside the question of contagion, you are still bound to give the advice indicated. Nor must you forget how the famous French physician Valicx, and our own talented and lamented Dr. Frick, of Baltimore, contracted fatal diphtheria from applying their mouths to the wounds made in tracheotomizing patients threatened with death by suffocation from the laryngeal variety.

The letters I receive from my old friends of former graduating classes almost always indicate anxiety on two points: firstly, what to say in a prognostic way; and, secondly, what it is best to do therapeutically.

Some of those now listening to me have seen with their preceptors many cases of the disease which now occupies us. They have had varied experience. With some the mortality has been very great; with others scarcely any cases have been lost. With nearly all, the greatest number of deaths has occurred at the commencement of the epidemic. This, you know, is observed as a law of these visitations, whether they be of cholera, yellow fever, typhus, dysentery, or what not. Nor is it difficult of explanation. In the earlier days of its prevalence, those most predisposed are those least able to resist the morbid influence. Moreover, this latter seems gradually to grow weaker, to exhaust itself, with time.

As to the other point, why some should be led to think it a disease of little gravity, and others of the most dangerous nature, that is simply owing to the type of disease they have encountered. Don't be misled by believing it due to the peculiar excellence of the treatment pursued. I know no better exemplification of what I mean than by referring you to the statistics of enteric fever, as seen in the Massachusetts General Hospital. Here, there was the same disease, nosologically speaking; the same treatment prevailed; the hygienic conditions were of the best; the same able men, and of their great ability we can all come up as cheerful witnesses; and yet the mortality indicated was as follows:—"In the year 1830, the deaths were one in three and a half; in 1831, they were one in fourteen and a half; and in 1829, one in twenty-five. From 1832 to 1835, inclusive, the mortality was a little less than one in six. From November, 1836, to November, 1838, there were fifty-five successive cases without a single death." Of the prognosis in this, as in other epidemic diseases, speak guardedly in the commencement. No man can know what type

* See first lecture, vol. viii. page 242.

the visitation may assume. So also in individual cases, be careful as to what you prognosticate. Some of the most promising cases, in appearance, that I have ever seen, have belonged to the class of insidious diphtheria. There has been little exudation, scarcely any fever, or interference, worth mentioning, with voice or breathing, when suddenly the larynx is invaded and the danger of death is imminent. In general, diphtheria is not fatal provided this last-mentioned complication do not occur. It is possible that ashenia or cardiac paralysis may kill, but in point of fact they very seldom do so. What gives us greatest anxiety is the *uncertainty as to the course* the exudation will take. Should we find it commencing in the posterior and inferior pharyngeal region, extending forwards and upwards, and leaving a healthy mucous membrane behind it, as the exudation is liquefied, we may hope for a happy termination in so far as the most imminent danger is concerned; but, I repeat, until all exudative action has ceased, just anxiety must continue to be felt.

What shall we do in the treatment of a case?

In the first place, attend to the hygienic condition of your patient; see that a comfortable bed be provided; that it be properly placed, with reference to air, light, and noise; and that no more persons be allowed about the sick person than may be necessary to attend to the duties of nursing. Unfortunately, there is a tendency for the female relatives and friends to hold a protracted meeting over children who are ill of diphtheria. I need not tell you how much of the air they breathe and contaminate; how much they talk to and worry the patient; how much they benevolently suggest, each one, her specific remedy, and how much miscellaneous trouble they give. Usually, one person at a time, who has read Miss Nightingale, is all that should be allowed in the sick room.

Having secured this, a cardinal and too much neglected matter, what shall you do in the way of medication?

That will depend on the case you may be called upon to treat. Should it be one of the mild variety, I should advise you to do nothing, beyond nursing and giving appropriate nourishment. By this, I mean such nutritious, easily digested food, as we can meet with in the animal broths, milk, and the farinacea. Do not overload the stomach, with the absurd hope that in its somewhat enfeebled state it will be able to go into the digestive business with so much energy as to counteract the natural tendency to debility. Unless for some special reason, the patient should not be made to eat oftener than once in three or four hours, and then the quantity should be carefully observed. I think something might be profitably written on this habit of stuffing sick people, that prevails with some practitioners. I know of no disease in which it is so much the rule as in typhus fever. In this, beef tea and brandy are, by some, systematically given, in the belief that the more the patient can be induced to swallow, the better will be his chance for recovery. Now there is nothing that so certainly tends to provoke restlessness, "nervous irritability," and insomnia, as the presence of material in the stomach which is beyond the digestive power of the patient.

We have a forcible illustration of this in the malaise that occurs from an over distended bladder. I can now recall cases in my experience, where opiates, by the mouth and by injection, valerian, musk, camphor, lavender, and many other antispasmodics, too tedious and useless to mention, had been prescribed by the doctor, without any relief, in which the evacuation of the bladder by catheter, or of the stomach by vomiting, have at once produced the quiet and sleep that know no succedanea as remedial agents.

It is very rarely that a sick person requires so much food as one in health would consume. It may be requisite to give it oftener, but even then we must be careful as to quantity and quality.

When the stomach is rebellious to the point of rejecting whatever is swallowed, I think it safer to resort to external applications in the way of irritants to the epigastrium, and to waiting for tolerance to be established, than to go

beyond the simpler means resorted to, such as prussic, carbonic, or the mineral acids, creasote, or a few drops of chloroform. In diphtheria, be very careful of the stomach. Not long ago, I met with a case in which a delicate little girl, suffering from gastric irritability, was made to take a nauseous dose of cinchona infusion every four hours. This was done with a view "to strengthen the child, and to bring about an appetite," notwithstanding that the dose was offensive, and only swallowed after a hard fight, each time.

For some days, strength can be very well supported by the use of nutritious enemata. To these it is wise to resort where sustenance is imperatively called for, and the stomach will not perform its duty. For such enemata, the strong animal broths are preferable. *Let the stomach rest.* In view of the obvious tendency to diminution of the red globules of the blood, as a part of diphtheria, the use of iron would naturally suggest itself. I have, almost always, prescribed small doses of the sesquichloride tincture, administered in cold sweetened water. This is readily taken by children, and is worth much more, in my opinion, than any or than all other so-called constitutional remedies put together. A child three years old will readily take every two or three hours from five to ten drops of the tincture.

With many practitioners, the chlorate of potash is considered as the chief remedial agent on which dependence should be placed. I have prescribed it largely, but with less satisfactory results than seem to have rewarded the experience of some others. Should you employ it, I would recommend you to be careful to avoid the large doses sometimes advised. I have known instances in which severe gastro-intestinal irritation has followed its use.

Where stimulants are indicated, wine-whew, milk-punch, whiskey, or good brandy will be found beneficial. In cases of great thirst, nothing is more grateful nor more easily retained by the patient than mint-julep. Under similar circumstances, you must not forget how useful the carbonic acid water proves; especially where there is irritability of the stomach. Cracked ice is also an excellent remedy.

Our anxious attention, as I have already told you, in this disease, is directed towards the air-passages. Is there any means in our possession by which we can prevent the exudation from reaching them, in the way of topical medication? I am sorry to say that I do not believe there is. In different published articles on the subject, there are many means advised, such as swabbing the throat with the muriatic tincture of iron, with muriatic acid, with bromine, nitrate of silver, etc.; but I think it safe to advise you not to employ these with the hope indicated. Punching and poking about the tender parts with hard instruments, in my opinion, is much more apt to result in harm than in good.

Some years ago, I thought I had seen benefit from applying the iodide of bromine (four to eight drops to an ounce of gum syrup), by means of a large, soft camel's hair brush. I then believed that it prevented the membrane from extending. In this, I was probably mistaken. The application has one certain good result, whenever there is a sanious discharge from the nose or fœtor of the breath. It acts as an antiseptic. So, no doubt, would creasote or carbolic acid, properly diluted. Nasal injections of liquor of persulphate of iron and glycerine (3j. to 3j.) are also very serviceable.*

In the terrible dyspnoea which accompanies the laryngeal form, the inhalation of steam is more efficacious than any other remedy. The apparatus recommended in Dr. Watson's Practice of Medicine may be resorted to; or the patient may be kept in a room so arranged as to be constantly filled with vapor, at a proper temperature, not less than 98° or 100° Fahrenheit.

In these always bad cases of laryngeal diphtheria, we must try to sustain life until the membrane shall have un-

* In confined rooms, where the unpleasant odor exists, an unstoppered vial of bromine, or a large dish, the bottom of which is covered with strong tincture of iodine, will act very beneficially as a disinfectant.

dergone the liquefactive change to which it has a natural tendency. It will, then, be expectorated, and we may hope for a cure, provided the exudation have not extended too far down the air passages.

In conclusion, never fail to keep your patient in bed whilst there is fever or debility. Be careful of premature exposure on account of the impressible state of the general nervous system during convalescence.

Original Communications.

CEREBRO-SPINAL MENINGITIS, OR SPOTTED FEVER.*

By WILLIAM H. DRAPER, M.D.

PHYSICIAN TO THE NEW YORK HOSPITAL.

It is well known to the members of the Academy that, within the past two years, a disease, commonly described as Cerebro-Spinal Meningitis or Spotted Fever, has prevailed epidemically in various sections of the country; especially in the neighborhood of Philadelphia, on board one of the naval school ships at Newport, and more recently with terrible fatality at Carbondale, in the coal regions of Pennsylvania. A brief experience in observing the disease at the latter place, in January last, has induced me to bring this subject before the Academy, and the fact that the malady exists epidemically at Long Branch and sporadically in Brooklyn and in this city, renders it one eminently worthy the attention and consideration of the profession at this time.

A brief historical review of this disease may not be uninteresting, and is certainly not unimportant in its bearing upon our views of its pathology. In doing this it is unnecessary to go further back than the beginning of the present century. Of antecedent epidemics it is sufficient to observe that history furnishes record of their fearful ravages in different parts of Europe during the sixteenth, seventeenth, and eighteenth centuries. In 1528 it prevailed throughout Europe, and was followed by the plague, and again in 1574, preceding the plague. In 1805 it appeared at Geneva, in Switzerland, and in this country at Medfield, in Mass., in 1806. From this time until 1812 it prevailed to a greater or less extent every year, generally in the winter and spring, at different towns in Massachusetts, in the valley of the Connecticut, on the shores of Lake Champlain and in Canada. In this connexion it is important to observe that the epidemic of spotted fever was followed in some places by one of pneumonia typhoides, and during the years that the spotted fever was prevalent in New England there occurred in different parts of New York State a very fatal epidemic of typhoid pneumonia. Dr. Joseph M. Smith, in his excellent monograph on the epidemics of this State (page 166), alludes to this disease as one "which appears to have been epidemically allied to, or a modification of the malignant distemper so well known in New England by the name of spotted fever."

Epidemic cerebro-spinal meningitis appeared in 1837 in seven cities in the south of France; before the completion of the year 1841 it had raged in thirty; after this it gradually declined, and in 1844 disappeared. In 1841 a severe epidemic of the disease occurred in some of the workhouses in Ireland. The disease has prevailed epidemically in this country in Tennessee, Missouri, Alabama, and Texas, and in the winter of 1857 it proved very fatal in the counties of Onondaga and Chemung in this State. The more recent epidemics of the disease have already been referred to.

This malady has been described under various names. Some, recognising its analogies to typhus, have classified it in the family of fevers. Sydenham probably described this same disease under the title of the *new fever* of 1685, which

prevailed throughout London and all England. Boudin, physician in chief of the Military Hospital at Roule, in France, describes it as cerebro-spinal typhus. The earliest epidemics in this country were described as spotted or petechial fever. Since its pathological anatomy has been understood, it has generally been called epidemic cerebro-spinal meningitis or arachnitis, a name which accurately describes its common and most prominent lesions, but which is objected to by some as giving a false idea of its pathology. The only objection that need be enforced at this time is, that the disease is not always cerebro-spinal. The cases are numerous in which the spinal element is absent.

As might be anticipated from the grave nature of the pathological lesions in this disease, its mode of attack and the symptoms which characterize its progress are bold and impressive. As in all epidemics, the cases vary in severity, and some authors have attempted to describe varieties in the disease. Thus M. Faure-Villar, who has written an excellent account of the malady as it occurred in Versailles in 1839, describes the disease as presenting two forms:—*inflammatory*, and the other *nervous* or *typhoid*. Dr. Eli-sha North, who wrote a treatise on spotted fever which occurred in Connecticut, classifies the cases under the head of *Gravior* and *Mitior*. It is unnecessary, however, to make these divisions, since the varieties manifestly depend on the greater or less violence of the action of the epidemic influence, or upon the idiosyncrasy or constitutional condition of the patient attacked. In many instances the attack is apoplectic in its suddenness, and sometimes not unlike apoplexy in its progress and termination. The victim is struck down suddenly in the vigor of health, becomes almost immediately unconscious, and dies in the course of a few hours.

Commonly, however, the disease is ushered in by more or less uniform and characteristic symptoms. Following rigors, the symptom, perhaps, which is most constant is pain, first noticed, it may be, in one of the limbs or joints, but almost invariably soon accompanied with cephalalgia. The latter ordinarily begins in the forehead, sometimes in the back of the head and neck; it is generally described as atrocious in severity, and persistent, the patient, in most cases, not ceasing to complain of it until he becomes delirious or comatose. In some instances it is partially relieved for a short time, but returns with increased severity. Another peculiarity of the cephalalgia frequently observed is its exacerbation towards evening. The pain in the back, which is most common in the cervical region, is not so constant a symptom as pain in the head, and does not occur so early; it is frequently associated with tetanic phenomena. According to M. Tourdes, the pain is most frequently located in the cervical, and more frequently in the lumbar and sacral than in the dorsal regions. The pains which have been described are not aggravated by pressure, but movement often renders them almost insupportable. Another prominent symptom affecting the nervous system is the exalted cutaneous sensibility; this is oftentimes a source of great distress to the patient, and makes him intolerant of the slightest disturbance. This intolerance is observed to some extent even after a loss of consciousness. Anæsthesia is a less common, though an occasional occurrence.

The sight is not affected in the majority of cases; sometimes there is double vision, and in rare instances blindness. The pupils vary; in the rapidly fatal cases they are apt to be dilated, in others they may be contracted or dilated, and present considerable variety as to mobility. Occasionally the conjunctivæ are injected, and instances are recorded where the eyes have been actually inflamed.

The hearing is not unfrequently dull, and patients occasionally complain of tinnitus aurium; in some instances complete deafness has been observed. This was the case in a patient I saw at Carbondale, who had recovered from a very severe attack of the disease; the recovery from this symptom is said to be always slow, and may never occur. The

* Read before the New York Academy of Medicine.

taste also may be impaired, so that it is a matter of indifference to patients what is administered to them in the way of medicine or food.

The modifications of the motor functions are also worthy of consideration; the most prominent are the tetanic spasms of the dorsal muscles and jaws. The opisthotonos is sometimes very marked. Trismus is a more rare occurrence. Contractions and rigidity of the limbs, especially of the upper extremities, are occasionally noticed. A tremulousness similar to that observed in *delirium tremens* is alluded to by M. Forget as existing in a number of cases in the epidemic at Strasbourg. General convulsions are not described by any author as a frequent occurrence in this disease, though they are sometimes observed at the beginning, but often towards the close of the malady. Paralyzes, also, are infrequent; local paralyzes have been noticed in a few instances. In the case of recovery before alluded to, where complete deafness was one of the sequelæ, there was an impairment of the power of coördination of the muscles of the lower extremities; there was no apparent loss of muscular power, but the condition of locomotor ataxia described by Duchenne was very marked.

As might be anticipated, one of the most common and characteristic features of this disease is the *delirium*. This is not one of the earliest symptoms, though, in rare instances, it is the first which attracts attention; ordinarily it comes on within the first twenty-four hours, often within twelve hours. The character of the delirium varies; sometimes it is active and violent, like the delirium of typhus, accompanied with great restlessness and agitation; at other times it is low and muttering, and occasionally it is gay and joyous, the patient laughing, talking incoherently, or singing familiar songs. In women a high degree of hysterical excitement sometimes occurs at the beginning of the disease. The delirium, in most instances, is intermittent, and alternates with somnolence or stupor like that of ordinary arachnitis, the exacerbations growing less frequent, and the somnolence deepening into coma as the disease approaches its termination. The face, though sometimes injected, never exhibited, in the cases I observed at Carbondale, the dusky hue of typhus; on the contrary, in most cases, the complexion was pallid. An expression of distress and anxiety is very common. The chest symptoms in this disease are of two kinds: those which depend upon the cerebral disturbance, and those which are due to pneumonic or cardiac lesions. The first are such as are ordinarily observed in acute cerebral affections; the respiration is sighing and irregular, and there may be a complaint of difficulty in breathing which is independent of any pulmonary affection. There are cases, however, in which actual lesion occurs, it may be pleurisy, pneumonia, or pericarditis, and these will have their appropriate symptoms, though, it must be remarked that, without physical exploration, these lesions may be overlooked in cases where the cerebral symptoms are strongly marked. "The pulse," as Dr. North remarks, "in all varieties and stages of this disease, is soft, weak, and never hard, although sometimes as slow, and even slower than in health; it is often intermitting, fluttering, or totally absent, even in cases in which the patient has afterwards recovered." Dr. Ottman, of Carbondale, to whom, as well as Dr. Burr, I am indebted for many facilities and much valuable information in the study of this disease, has observed the modifications of the pulse and respiration very closely, and has frequently noticed a sighing and irregular breathing, with an intermittent pulse, as the first premonitions of the disease. These observations have been made principally among children, in whom such irregularities could hardly be ascribed to moral emotions.

The derangements of the alimentary canal, in this disease, are among its prominent phenomena. First in frequency and persistence among these derangements are nausea and vomiting; they are often among the earliest, if not the earliest symptoms of the attack. The matters vomited consist at first of the contents of the stomach, and afterwards of fluids taken into the stomach, discolored with

bile; in rare instances, the presence of blood has been suspected from the color.

The tongue is ordinarily covered with a light, whitish fur; sometimes it is bloodless and flabby, sometimes brownish, and where the disease is protracted it becomes dry, and, with the teeth, covered with sordes. The appetite varies; it may be completely lost, or as good as in health, and the thirst is not marked. Ordinarily there is constipation, which in most instances is readily overcome by purgatives, though in cases which terminate rapidly this symptom is obstinate.

The *skin*, at the beginning of the disease, is said to be invariably dry, and without marked increase in temperature; as the disease progresses, the dryness may obstinately continue, though there seems sometimes to be a tendency to local sweating about the head and upper extremities; general diaphoresis is commonly very easily induced. The eruption, to which this malady owes one of its names, and which is one of its characteristic symptoms, is varied and peculiar. The spots which constitute this eruption have been described as purely ecchymotic—simple subcutaneous hæmorrhages; they are this and something more; they are truly exanthematous as well as ecchymotic. Several observers speak of the eruption as occasionally assimilating that of scarlet fever, sometimes with, sometimes without petechiæ. M. Lefevre alludes to impetiginous eruptions; M. Faure-Villar describes the eruption in most of the grave cases as consisting of spots of a dark brown or bright purple upon the anterior part of the trunk and extremities, not disappearing on pressure, and sometimes slightly papular; occasionally the spots were of inky blackness and irregular shape. Dr. Henry Fish, in an excellent description of the epidemic which occurred in Hartford in 1809, says: "I have seen some cases with petechiæ, and an eruption or efflorescence resembling scarlet fever. In some of the towns around Hartford, carbuncles and buboes in its first stages have been frequent; and in Springfield, Massachusetts, there were several cases with an eruption in the latter stages similar to that of variola." In the cases which I saw at Carbondale, the spots exhibited the true petechial character in the centre, with an erythematous areola. The spots were sparsely distributed over the trunk and extremities, varying in size from that of a pin-head to a five or ten cent piece; the outline of the larger spots was generally irregular. Sometimes the cuticle was raised with a sanious fluid, and the denuded surface had a tendency to ulcerate. In two or three instances the rose-colored spots were well marked; they differed from those of typhoid fever in that they were larger, more irregular in shape, and did not entirely disappear on pressure." Dr. Ottman writes to me in reference to the eruption:—"The eruption is not a true petechial eruption, but consists most frequently of rose-colored spots, from the size of a pea to that of a dime; also of ecchymosed spots, giving the appearance of blood-blisters, some of the color of venous, and others of arterial blood." M. Tourdes noted the occurrence of herpes labialis in two-thirds of the cases that came under his observation in the epidemic at Strasbourg. The same observation was made by Dr. Phelps in the United States Military Hospital at Brattleboro', Vermont.

The eruption, it should be remarked, is not an invariable accompaniment of this disease; in every epidemic cases occur which demonstrate this fact. Dr. Nathan Strong, in an inaugural dissertation on the epidemics in Hartford, Connecticut, says:—"These spots, which, in 1806-7, marked almost every case, in 1808-9 were rarely observed." The eruption makes its appearance very early, sometimes within six hours from the attack; it remains, of course, after death.

The urine, in the majority of cases, presents no especial modifications; most observers speak of it as pale, limpid, sometimes sedimentary, and more abundant than in health. I have seen one instance of hæmaturia and one of albuminuria.

Such are the principal symptoms which characterize this

fearful malady; they will be recognised, many of them at least, as the phenomena of acute meningeal inflammation. In cases of recovery the cerebral symptoms are the first to subside, the pulse resumes its normal standard and regularity, and in some instances the convalescence is rapid and complete; more frequently it is retarded, and the system recovers slowly from the shock it has sustained. Loss of sight and hearing, feebleness of intelligence, and more or less extensive muscular paralysis, have all been observed as sequelæ of the disease. In fatal cases, patients generally die in coma, sometimes of very short duration; at other times prolonged for several hours, and accompanied with the usual ataxic phenomena of subultus tendinum, extremely rapid and feeble pulse, and involuntary discharges from the bowels and bladder. In rare instances the patients linger for several weeks in a condition of marasmus, and finally die from inanition. The progress of this disease is divided by M. Tourdes as well as by M. Faure-Villar, into three periods. The first is characterized principally by the intense nervous symptoms, pain, delirium, or sudden loss of consciousness, a period in which some die; the second period is that of a febrile reaction; and the third is indicated by the perversion of the functions of the nervous system, by great prostration and marasmus.

(To be Continued.)

THE TREATMENT OF ANEURISM,

INVOLVING THE SUBCLAVIAN IN SUCH A PART OF ITS COURSE,
THAT A PROXIMAL LIGATURE IS ONLY APPLICABLE
WITHIN THE SCALENI.

By T. T. SABINE, M.D.,

OF NEW YORK.

(Continued from Page 91.)

XII. LIGATURE OF THE SUBCLAVIAN.—Surgeons recognising the difficulty and danger of the application of a ligature to the Innominate, sought some other means of cure. This they thought was found in the ligation of the Subclavian within the Scalenii. I have collected the details of thirteen cases, all that I can find mentioned, in which a ligature was applied to this part of the artery. In three of these thirteen both the subclavian and carotid were ligated, and in one the subclavian, carotid, and vertebral. These four I shall leave for the present, confining myself to those cases in which the subclavian alone has been ligated. There are then nine cases coming under this head, which are here tabulated:

Operator.	Result.	Causes of death.
1. COLLES,	death 4th day,	unknown.
2. MOTT,	" 18th "	hæmorrhage.
3. HAYDEN,	" 12th "	"
4. O'REILLY,	" 13th "	"
5. PARTRIDGE,	" 4th "	pericarditis and pleurisy.
6. LISTON,	" 36th "	hæmorrhage.
7. RODGERS,	" 15th "	"
8. AUVERT,	" 11th "	"
9. AUVERT,	" 18th "	"

Of these nine two died from irrelevant causes, before the ligature had had time to separate. The remaining seven all died from hæmorrhage. In order to render the subject clearer, I will give a short epitome of the appearances observed after death at the immediate seat of ligature.

COLLES. The death of this patient is attributed by all surgical writers to hæmorrhage, but without very good reason, I think. The ligature could not have separated by the fourth day, and, moreover, no mention whatever is made of any hæmorrhage having occurred, except on one occasion, when "on raising the flap of skin a small quantity of coagulated blood was found in the wound, though not in its deepest part." No blood was found in the thorax.

MOTT. Autopsy not given.

HAYDEN. The subclavian at the seat of ligature was gap-

ing irregularly for three-fourths of its calibre, the remaining one-fourth sound and retaining the ligature.

O'REILLY. The divided extremities of the subclavian were patulous and separated nearly two inches by coagula. Their edges were jagged and irregular, and there seemed not to have been the slightest attempt at reparative process.

PARTRIDGE. Death occurred eight days after the first, and four days after the second operation, from pericarditis, etc. No clot existed either in the subclavian or the vessels springing from it.

LISTON. The subclavian at its divided proximal extremity was completely filled with coagulum, but this did not reach above two lines from the extremity; at this point a small artery came off, and up to that point the artery was pervious. "The trans. colli came off immediately before the point where the aneurism commenced, then a space of about an inch where no artery came off, and then, at nearly the same point of the artery, the vertebral, mammary, and thyroid-axis, all arose, and two lines from this point was the divided extremity of the artery, pervious, and with no attempt at the formation of a clot or of any adhesive process."

RODGERS. The ligature had been applied about one and a quarter inches from the aorta, and immediately at the root of the vertebral on its cardiac side. The stump of the subclavian, between the aorta and ligature, presented the appearance of a round solid cord. No plug other than soft coagulum, easily drawn out, occupied the cavity of the distal extremity, which was evidently of post-mortem formation. The vertebral contained a similar clot of like origin, while all the other branches were patulous.

AUVERT. An oblong, caudate clot, the size of a pea, obliterated the cavity of the artery on the proximal side of the ligature. A rupture of the artery existed on the distal side, near the origin of the different branches. No clot on the distal side.

AUVERT. The artery was perfectly obliterated on the cardiac side of the ligature by a smooth clot (embolo glabro) of the size of a lentil. On the opposite side there existed a fimbriated rupture, in the longitudinal direction and in the neighborhood of the branches of the subclavian. In analysing these cases two things are to be considered, viz. 1st. proximal clot; 2d. distal clot.

Proximal clot.—In four of the seven a proximal clot had formed; in the remaining three no attempt had been made to do so.

Distal clot.—In every case no attempt had been made at its formation.

MR. QUIN gives the length of the right subclavian from its origin to the point at which branches arise, as follows:

$\frac{1}{2}$ inch and under	8
More than $\frac{1}{2}$ in. not exceeding 1	33
" 1 " " "	1 $\frac{1}{2}$ 23—64

It is thus seen that in nearly two-thirds of the cases it is one inch or under. The same reasoning that was adopted in speaking of the innominate, in regard to the position of the ligature, is applicable here. Let a case be taken in which the ligature is applied midway between the origin and the first branch given off; there will then be a space on each side of the ligature of half an inch or under. On the one side a strong current of blood will be passing up the innominate to enter the carotid, not more than four to five inches distant from the heart. On the other a less powerful, though equally effective, current will be passing into the subclavian, beyond the ligature, through the vertebral, etc. Now there is no good reason for supposing that under such circumstances a clot, either distal or proximal, would form. How are those cases accounted for, then, in which a proximal clot was formed? In one (Rodgers) the ligature was applied to the left subclavian, in which the current is neither so direct nor so powerful as in the right, and in which there is a sufficient amount of room for a proximal clot to form. In the other three cases (Liston, Auvert, Auvert), it is most probable that the ligature was applied much nearer

to the branches of the artery than to its origin,* the surgeons fearing the circulation through the innominate more than that beyond the ligature. By as much nearer as the ligature is applied to the origin of the first branch of the subclavian, by so much does it increase the chance of formation of a proximal clot and diminish that of a distal, and *vice versa*. In such cases as these the difference of a single line, or even one-half line, may determine whether a clot is or is not to be formed. Ligature of the subclavian alone, in the first part, should be banished as a means of treatment. Suppose now this operation were in itself perfectly successful, would it accomplish the desired result? I think not, and for reasons already given under the head of innominate ligature, which it is unnecessary to repeat here.

XIII. LIGATURE OF SUBCLAVIAN AND CAROTID.—Seeing the fatal results attending ligature of the subclavian alone, surgeons endeavored to avert these by the above operation. In adopting it they had two objects in view: 1st. to insure a proximal clot; 2d. to afford more space for a distal one. The argument was this: if a ligature be applied to the subclavian immediately at its origin, more room, it is true, will be afforded for the formation of a distal clot, but then there will be almost absolute certainty of an absence of a proximal one: if now a ligature at the same time be applied to the carotid, it will render a proximal clot, in the innominate, pretty certain, and the full advantage will be reaped of the greater amount of space afforded between the origin of the subclavian and its first branch. The carotid above the ligature will almost certainly be obliterated. How well this succeeded will now be seen. In the four cases not included under the last head, this operation was performed. In one of these the vertebral also was ligated, and this I shall consider hereafter.

The following are the three other cases:

- | | | |
|---------------|-----------------|-------------|
| 1. LISTON, | death 13th day, | hæmorrhage. |
| 2. CUVELLIER, | " 10th " | " |
| 3. HOBART, | " 16th " | " |

The following is a short account of the appearances observed after death.

LISTON. The innominate was found shrunken and plugged with a firm adherent coagulum. The carotid was plugged from the point of ligature to the bifurcation. The subclavian and the arteries arising from it were all open.

CUVELLIER. The subclavian was plugged on the proximal, but not on the distal side of the ligature. The carotid was obliterated. No mention is made of the condition of the innominate.

HOBART. "The arteria innominata was found healthy, and the circulation through it had not been stopped. It was found that *perfect union had taken place where the ligature had been applied to the subclavian*, but a small opening was found in the carotid, through which the hæmorrhage had occurred. In analysing these cases the following are the results:

1st. Carotid ligature. Distal side.—In two there was a clot, and probably in the third. **Proximal side.**—In two the innominate was plugged, in the third it was not.

2d. Subclavian ligature.—In two there was a proximal (innominate) clot, but no distal one. In the third case (Hobart's) "perfect union had taken place where the ligature had been applied to the subclavian." Though all these patients died of hæmorrhage, it did not in all come from the same source. In two it came from the distal side of the subclavian ligature, as it did in the nine cases under the last head; in the third it came from the carotid, and probably from the proximal side. Among the thirteen cases of ligature of the subclavian in its first part, this case of Hobart's stands out alone, as the only exception to the all but universal rule that the artery has never been closed at the point of ligature. It is on this account the more interesting, but yet it would not, I think, warrant the surgeon's attempting the cure of subclavian aneurism by the operation now under consideration.

* In Auvert's cases it was midway.

What was gained by this method? 1st. The pretty certain formation of a proximal clot. I have obtained the records of seven cases in which the innominate has been placed in such a condition as that it should be plugged, and the result stated—Mott, Graefe, Bland, Lizars, Liston, Hobart, Parker. In two of these (Hobart, Mott), the artery was not obliterated. In the other five it was. If, then, a proximal clot formed in three out of the four cases of ligature of the innominate (Mott, Graefe, Bland, Lizars) one might naturally expect that the proportion would be much larger in those cases in which the subclavian and carotid have been tied, and in which a much greater amount of room is afforded. 2d. More room for a distal subclavian clot. This additional amount of space, however, was still insufficient. In Hobart's case the ligature was applied midway between the origin and first branch, and therefore the union at that point was very exceptional, one might almost say accidental. In the other two cases no clot was formed. These two cases, with the nine before given, and the one next to be discussed, make twelve in which no distal clot has formed, and therefore, notwithstanding Hobart's case, this operation should, I think, be abandoned. With regard to the distal carotid clot, it is pretty certain to form. There is a space of about four inches between the ligature and first branch given off, that is the bifurcation. The carotid has been tied four times out of the thirteen cases; in three of these a distal clot formed, and probably in the fourth, though the condition is not stated. Moreover, in ligature of the carotid alone for carotid aneurism, etc., the operation is done much higher up, and consequently less room afforded, and yet a distal clot generally forms.

(To be Continued.)

Progress of Medical Science.

AMERICAN JOURNAL OF MEDICAL SCIENCE FOR 1864.

ART. I. On Injuries of the Head By JOHN ASHURST, JR., M.D., *one of the Surgeons to the Episcopal Hospital, etc., etc.*—The writer details a number of cases of wounds of the face, scalp, and fractures of the skull; to the latter class of injuries, however, he pays more particular attention, and gives many practical rules in relation to the treatment of such cases, which, as they are by no means new, we will not notice particularly.

ART. II. Gunshot Fracture of Superior Maxilla, and Wound of Internal Maxillary Artery; Ligature of Common Carotid Artery; Paralysis, with Convulsions of opposite side after thirty-five days; Death after forty-one days; Abscess of the Brain. By W. W. KEEN, JR., M.D., *Act. Assistant-Surgeon, U.S.A.*—Dr. Keen relates an interesting case of wound of the superior maxillary artery for which the common carotid was tied. The patient, a corporal, æt. 35, "was wounded July 1, 1863, at Gettysburg, by a minié ball, which entered one and three-fourth inches below and to the left of the left eye, and lodged behind the first upper molar of the same side, partially destroying the left palatine arch and knocking out the last two molars and the corresponding portion of the alveolar process." The ball remained lodged in the jaw for two days, at the end of which time it fell out of its own accord. From the time of the admission of the patient into the Satterlee U. S. A. Hospital, Philadelphia, July 11, when the carotid was ligated, until the sixteenth, he suffered from four or five hæmorrhages, and also had two bleedings at short intervals between the sixth and eighth days after the reception of the injury. On the third day after the operation secondary hæmorrhage occurred, when the wound in the cheek was enlarged, several pieces of bone removed, and the anterior plugged with lint saturated with Morel's Solution.

August 1, another hæmorrhage occurred, on the 2d another, and on the 7th still another—all of which were controlled by appropriately plugging the wound. Immediately after the ligation of the artery the patient suffered from severe cerebral symptoms in the shape of syncope, and a temporary and violent spasm of all the muscles. The brain symptoms did not again make their appearance until after an interval of thirty-five days, when he became paralysed in the opposite side; convulsions also attacked the paralysed side, and continued to recur daily until death—forty-one days after the operation. The ligature came away in the unprecedentedly short time of four and a half days.

On cutting into the brain at the post-mortem examination, the left hemisphere was found the seat of several surface abscesses, as well as some which were seated in the substance of the organ. The right hemisphere contained an abscess in its substance of considerable size, and situated anteriorly. The carotid artery was consolidated from within three-fourths of an inch of the aorta up nearly to its bifurcation, when it again became patulous. At the point of ligation there were a few drops of pus in a cup-shaped cavity, and throughout its entire consolidated portion the clot seemed as if ready to speedily disintegrate. The point of ligation in the maxillary artery could not be found by injection, probably owing to the opening being firmly plugged by a coagulum. There was no paralysis on the left side, notwithstanding the existence of the abscess in the white substance of the right lobe. The Doctor concludes, under the circumstances, that the patient would have had a better chance had one, or even both, of the external carotids been tied rather than the main trunk.

ART. III. *Successful Ligation of External Iliac Artery for Traumatic Aneurism of the Femoral; with a Statistical Table showing the Results of the Operation of Tying the External Iliac Artery.* By JAMES B. CUTLER, M.D., Acting Assistant-Surgeon, U.S.A.—Dr. Cutler relates a case of ligation of this artery which has connected with it several points of interest. The patient, a private in a New Jersey regiment, eight years ago, accidentally plunged the large blade of a pocket-knife into the inner side of the left thigh, about two inches below Poupert's ligament, the blade entering the femoral artery near the profunda. The wound healed rapidly, so that at the end of a week afterwards he was able to attend to his occupation—that of a farmer. He suffered no inconvenience from the injury until last August, when, as the result of hardship and a long fatiguing march, his limb suddenly swelled and became very painful, continuing in that condition until the sixth of February, 1864, when the operation was performed. The patient made a good recovery, the ligature coming away on the twenty-fifth day. The paper concludes with a statistical table of operations performed on this artery since 1846, and thirty-five cases are collected. Of these it is shown that twenty recovered.

ART. IV. *Aneurismal Tumor of the Orbit—Recovery.* By E. L. HOLMES, M.D., Chicago, Illinois: Lecturer on Diseases of the Eye and Ear, Rush Medical College; and Surgeon to the Chicago Charitable Eye and Ear Infirmary.—Dr. Holmes relates a very instructive case of aneurism of the orbit from a gunshot wound cured by the internal administration of ergot and veratrum viride in the short space of six weeks.

ART. V. *Successful Case of Double Ovariectomy—One Hundred and Thirty-five Injections made into the Peritoneal Cavity during Seventy-eight Days.* By E. R. PEASLEE, M.D., LL.D., New York. Our readers are already familiar with this case, it having appeared in the MED. TIMES in the proceedings of the New York Pathological Society.

ART. VI. *Cancer of Stomach.* By W. S. W. RUSCHENBERGER, U.S. Navy. This case, which is given in great detail, serves only to show the insidious manner in which the disease attacks the patient, the difficulty which so often attends the formation of a diagnosis, and the comparative uselessness of even palliative remedies.

ART. VII. *Surgical Cases.* By DAVID RANKIN, M.D., Shippensburg, Pa., late Act. Assistant-Surgeon, U.S.A.—Dr. R. relates several cases of gunshot injury, comprising two of arm, two of face and neck, and one of bladder.

ART. VIII. *Poisoning by Strychnia.* By JOSEPH WILSON, M.D., Surgeon, U. S. Navy.—This case is of interest on account of the rapid and steady recovery after the ingestion of a large quantity of strychnia, supposed to be forty grains. Tannin in oft-repeated doses was the remedy mainly used, and fifteen hours after swallowing the poison the patient was well enough to stand up. The Doctor thinks that the recovery may have been due as much to the coffee drunk at supper, and to the manner in which the poison was taken (rolled up in pellets of bread), as to the remedies which were employed.

ART. IX. *Report of a Trial for Malpractice in the Court of Common Pleas of Perry Co., Pa.* By ISAAC LEFEVER, M.D., one of the Associate Judges of the Court.—This is a very elaborate and interesting report, founded on a trial for malpractice for the amputation of an arm in a case of shoulder presentation in order to facilitate the operation of turning, the mother being threatened with death from præ-partum hæmorrhage. The mother and child were both saved, the latter being in her eighth year at the time of trial, with a stump about two inches long. The facts of the case are these:—Mrs. Collyer, of Penn Township, fell in labor with her seventh child in June, 1858. Dr. Elbert, who lived in the neighborhood, was sent for, and recognised an arm presentation, accompanied with a very rigid os. Relaxants were administered to overcome the rigidity, but failed in having their effect, after having been faithfully tried for seven or eight consecutive hours. The physician in the meantime made every effort to turn, but, owing to the rigid condition of the parts, failed to accomplish his object. As soon as the arm presented, præ-partum hæmorrhage came on, which rendered immediate delivery imperative. At the end of eight hours Dr. McMorris of Buffalo was called in, and after the two had made a strenuous effort to pass the os, and found, on account of the existing rigidity, that it was impossible to do so, it was decided best, in order to increase the space within the os, to amputate the arm, which was done as high up as possible, when the uterus was evacuated in fifteen minutes after.

The medical witnesses for the plaintiff testified that the proceeding was altogether unwarrantable, and stated that even if such a practice were allowable, increased space could only be obtained by an amputation at the shoulder-joint.

The testimony for the defence clearly showed that the proceeding was justifiable under the circumstances, and several of the medical gentlemen present gave it as their opinion that it was the *only* course to pursue to save the life of the mother and the child. In fact, the whole testimony of the experts was so conclusive in favor of the defendant, that the case was not put to the jury, and a nonsuit was entered by the judge. The case presents many important points for the consideration of medical practitioners.

ART. X. *Description of a Syringe for Washing the Auditory Canal.* By W. S. W. RUSCHENBERGER, M.D., U.S.N.—This instrument is a modification of the "tub syringe" of Mr. Kuemerle of Philadelphia. The tub is divided by a vertical partition into two compartments of nearly an equal capacity (six fluid ounces). The pump, which is two and a half inches in length, is attached by a screw-joint to a base, which is firmly fixed to the bottom and centre of one of the compartments. This base contains a conical valve and a movable perforated plate, which is interposed between the valve and the bottom of the piston. The shallow chamber which exists between the under face of the plate and the superior surface of the valve is connected by a slender tube with the exit-pipe and nozzle. Openings are left at the bottom of the base of the pump for the admission of liquid from the tub into the syringe whenever the piston and valve are raised. The base of the exit-

pump is fixed in the second compartment, and contains a small conical valve like that of the syringe, which closes when the piston is raised, and opens when it is depressed. The exit-pipe is screwed upon its base above the valve. It rises perpendicularly to nearly the top of the tub, and then is curved, so as to project longitudinally about one-fourth of an inch above the compartment in which it stands. It is connected with a suitable nozzle by means of vulcanized rubber tubing. While using the instrument there is no necessity of using an ear-spout to receive the washings as they flow from the meatus. The liquid thrown into the ear is always kept separate from that which escapes from it. The instrument is made of brass, and the tub is so fashioned as to fit nicely under the ear, and thus prevents altogether that very common annoyance which attends the use of the ordinary ear-syringes in soiling the patient's clothes by the washings.

American Medical Times.

SATURDAY, AUGUST 27, 1864.

HISTORY OF THE ORIGIN OF THE AMERICAN MEDICAL ASSOCIATION.

For the purpose of directing the attention of the Profession still more strongly to the American Medical Association, we propose in this article to give a succinct account of its history. And this is the more necessary, as very erroneous ideas exist in regard to its origin. The success attending the establishment of the "*Provincial Medical and Surgical Association*" of England in 1832, and of the "*British Association for the Advancement of Science*" founded at a somewhat earlier period, called the attention of many of our medical and scientific men to the importance of forming similar institutions in our own country. If we look, however, still deeper into the question of the origin of such associations either here or elsewhere, it will doubtless be found in the spirit of the age in which we live, and the recent progress of the human mind in the acquirement of knowledge. It is doubtless the combined operation of these causes which alone affords the true explanation of the origin, as well as the similarity of plan found to exist in all these institutions, now established in all the countries of Europe; and it is not surprising that where the intellectual constitution of man is in itself the same, acts under the same circumstances, and is stimulated to exertion by similar wants, there should be a unity of plan as well as of purpose in the proceedings instituted for the supply of these wants. There is, indeed, much in the actual state of science, whether general or medical, as well as in the effect produced upon the minds of those engaged in scientific pursuits by the peculiar constitution of the times, which alike demands and favors the co-operative system, and which must produce similar results everywhere, viz. associations for co-operative action.

But, however this may be, we find Dr. J. V. C. SMITH, then editor of the "*Boston Med. and Surgical Journal*," calling the attention of the profession to the importance of establishing a National Medical Association as early as Sept. 1836 (Vol. xv. p. 96), when he used the following language: "If it were found, on trial, to be impracticable to bring together all classes and denominations of philosophers, the effort to have a great '*National Convention of Medical*

Men' might be attended with more success. The opinions of correspondents on the feasibility and probable utility of the measure are respectfully solicited."

Again, in vol. xvi. p. 34 (Feb. 15, 1839), Dr. SMITH resumes the subject as follows: "*American Medical Association*—By reading an account of a convocation at Southampton, Eng., for the purpose of forming a southern branch of the 'Provincial Medical and Surgical Association,' it brought strongly to mind the importance of forming a great National Medical Society, which we have repeatedly urged through the pages of this Journal upon all true friends of medical science in the United States. If some manifestations of interest towards the accomplishment of this desirable object are not made within the present season, we shall be compelled to acknowledge that there is no spirit or energy remaining among us. Nothing could contribute so effectually to a perfect system of professional good-fellowship as this; and the good influence which would be exerted throughout the Union by a *National Medical Society* cannot be calculated."

Again, in vol. vii. p. 368 (Jan. 10, 1838) Dr. Smith urges his appeal as follows:—"American Medical Association—This is, by no means, the first time we have urged upon the medical men of this country the necessity of forming a great National Medical Society for the advancement of science and good-fellowship. Again we call upon our professional brethren to devise some plan for congregating the ensuing summer, either at Washington or Philadelphia; and if a prospectus were devised and freely circulated, under the sanction of one or two names of gentlemen of Boston, Providence, New Haven, New York, Baltimore, Philadelphia, Richmond, Charleston, Cincinnati, Louisville, etc., there might be convened in the month of August next, an illustrious body of learned men, who would give an impulse to the study of medicine in the United States of incalculable benefit to the national weal, and certainly to the nation's honor and glory. We contemplate forwarding, ere long, to all our exchange Journals, a scheme for organizing a *National Association*, about which we ask advice and counsel, and if acceptable, also, their joint coöperation in the accomplishment of this desirable convocation."

This was eight years before the formation of the present "American Medical Association." But in consequence of, and growing immediately out of these repeated appeals of Dr. Smith, a prospectus or circular, signed by several eminent physicians, was sent out in the month of May, 1840, appointing a meeting for the ensuing May, for the assembling of a "National Medical Convention" in Philadelphia, for the promotion of medical science. Delegates were accordingly chosen from several medical associations in the northern, middle, and probably southern States, including two or three State Societies, but no northern medical colleges were represented. Drs. BECK and WING, of Albany, were present, also the whole delegation from New Hampshire, Drs. HOWE, HILL, and CHADBOURNE. Dr. CHAPMAN, of the University of Pennsylvania, was appointed a delegate, and six others by the Philadelphia Medical Society. Massachusetts and most of the northern States were not represented. The delegates were so few in number, it was not thought advisable to organize the meeting; at an adjourned meeting of the delegates present, it seemed to be the general opinion, that before a convention could be held which would promote the interest of medical science, spe-

cific objects should be laid before the profession, and fully discussed in the medical journals.

The subject was accordingly agitated in the various medical periodicals of the country, particularly the *New York Journal of Medicine*, the *Buffalo Medical and Surgical Journal*, the *New Orleans Medical Journal*, and the *Boston Medical and Surgical Journal*, so that the profession was well prepared to receive favorably a proposition made by the New York State Medical Society, at its annual meeting in February, 1845; at which meeting the following preamble and resolutions, offered by Dr. N. S. Davis, were unanimously adopted:

"Whereas, It is believed that a *National Convention* of medical men would be conducive to the elevation of the standard of Medical Education in the United States, etc.

"Whereas, There is no mode of accomplishing so desirable an object without concert of action on the part of the Medical Societies, Colleges, and Institutions of all the States—Therefore,

"Resolved, That the New York State Medical Society earnestly recommend a *National Convention of Delegates*, from Medical Societies and Colleges in the whole Union, to convene in the City of New York on the first Tuesday of May, in the year 1846, for the purpose of adopting some concerted action on the subject set forth in the foregoing preamble."

A committee of three was appointed to carry into effect the above resolution, composed of Drs. JAMES McNAUGHTON and PETER VAN BUREN, of Albany, and Dr. N. S. Davis, of Binghampton, of which Dr. Davis was Chairman.

This Committee reported at the next meeting of the New York State Medical Society (Feb. 1846), that they had addressed a circular containing the preamble and resolutions of the Society, with such comments as were deemed advisable, to all the State Medical Societies and Medical Colleges in the United States, as far as the existence of such Colleges and Societies could be ascertained, to which favorable replies were very generally received, pledging that delegates would be sent from at least fifteen different States. The Medical Schools of Philadelphia were the only ones from which replies were received, that declined sending delegates and giving a hearty support to the proposed measure. They also reported that nearly every medical journal throughout the whole Union not only favorably noticed but warmly commended the holding of such a convention. In conclusion, the committee remarks that, "the leading and influential members of the medical profession have long felt the necessity of some national action, some central point of influence around which the active and choice spirits of the whole profession can rally, and from which may be made to radiate an elevating, healthful, and nationalizing influence over the whole country."

In accordance with the above invitation a large number of delegates, representing about one half the States of the Union, convened in the City of New York in May, 1846, and organized "*The American Medical Association*," by choosing Prof. J. KNIGHT, M.D., of New Haven, as its first President; and JOHN BELL, M.D., of Philadelphia, and ED. DELAFIELD, of N. Y., as its first Vice-Presidents.

The subsequent history of the Association is well known. We only proposed to point out its origin, that due credit may be assigned where it justly belongs. *Palmarum qui meruit ferat.*

THE NEW STATE EMIGRANT HOSPITAL.

A SELECT company assembled at Ward's Island on the 10th inst. to witness the ceremony of laying the cornerstone of the New State Emigrant Hospital.

After an impressive prayer by the Rev. Mr. Peters, Mr. G. C. Verplanck, the venerable President of the Commissioners of Emigration, entertained the audience with a learned and eloquent address, in which he furnished a large amount of statistical information connected with the history of this enterprise. Taking the trowel he then proceeded with the usual ceremonies to lay the corner-stone, in which was first deposited a box containing Reports of the Commissioners of Emigration from 1849 to 1863; Reports of the Emigrants' Savings Bank from 1850 to 1863; Plans and Specifications of the building; New York daily papers; State Manual of New York; Manual of the City of Brooklyn; Coins; Fractional Currency, and business cards of some of the gentlemen present. The *Gloria in Excelsis* was then sung, in which a great number of voices joined, and the benediction pronounced by the Rev. Mr. Peters, after which the company adjourned to the house of the superintendent, where they partook of a sumptuous dinner. Speeches were made by Mr. Verplanck, Thurlow Weed, E. F. Purdy, Dr. Carnochan, and a number of other eminent citizens. The following is a description of the new hospital.

The hospital buildings are five in number, arranged upon the pavilion plan, the centre building being three stories high, the other four buildings two stories high, separated by a wide courtyard, completely isolating them from each other. The wards are upon the southern portion of each pavilion, and the cold northern storms are cut off from each ward by the nurses' room, dining room, closets, hall, &c., thereby equalizing the temperature of the wards and assisting in their ventilation. Each of the pavilions is connected by corridors large enough to be used by the convalescent patients as a sanatorium, and they are to be furnished with books, papers, and other sources of amusement. These sanatoriums are sufficiently separated from the wards to enable the convalescents to amuse themselves without disturbing the patients who are unable to leave their beds. These corridors serve also to connect the several pavilions, bringing them all under one roof, enabling the officers and attendants to visit all parts of each pavilion without being exposed to the open air. They also simplify and aid the ventilation and warming of the entire hospital. The ventilation and warming will be done by steam taken from the boilers placed in a disconnected building, to be located near the centre of the hospital. These boilers also supply the steam for the kitchen, laundry, and bakery.

The hospital will accommodate the superintendent's offices, reception room, physician's offices, apothecary's shop, laboratory, baggage and store rooms, large operating theatre, museum, instrument room, and all the necessary nurses' rooms, dining rooms, water-closets, bath rooms, and bedding rooms for each ward. The wards will accommodate three hundred beds. Each bed will have twelve hundred cubic feet of air, which is the largest number of feet allowed in any of the best existing hospitals. The building will be plain in style, appropriate to the purpose for which it is intended, and will be built in a substantial and thorough manner throughout, at an expense of about three hundred thousand dollars.

THE CASE OF SURGEON-GENERAL HAMMOND.

[From the Washington Chronicle.]

We present our readers this morning with the report of the Judge Advocate General in this remarkable case, which engrossed a court-martial for so many weeks, together with the President's order in confirmation of the sentence of the court. The following officers composed the court:

Major-General R. J. Oglesby, Vols., President.
 Brigadier-General W. S. Harney, U.S. army.
 Brigadier-General W. J. Ketchum, U.S. vols.
 Brigadier-General G. S. Greene, U.S. vols.
 Brevet Brigadier-General W. W. Morris, colonel 2d U.S. artillery.

Brigadier-General A. P. Howe, U.S. vols.
 Brigadier-General J. P. Slough, U.S. vols.
 Brigadier-General H. E. Paine, U.S. vols.
 Brigadier-General J. C. Starkweather, U.S. vols.
 Major John A. Bingham, judge advocate.

JUDGE ADVOCATE GENERAL'S OFFICE,
 May 17, 1864.

To the Honorable, the Secretary of War:

Brigadier-General William A. Hammond, Surgeon-General, United States army, was tried upon charges of "disorders and neglects, to the prejudice of good order and military discipline," "conduct unbecoming an officer and a gentleman," and "conduct prejudicial to good order and military discipline."

The specifications which set forth the statement of facts alleged, and found by the court to constitute these offences, are as follows:

CHARGE 1st. "Disorders and neglects, to the prejudice of good order and military discipline."

Specification 1st. "In this: that he, Brigadier-General William A. Hammond, Surgeon-General, United States army, wrongfully and unlawfully contracted for, and ordered Christopher C. Cox, as acting purveyor in Baltimore, to receive blankets of one William A. Stephens, of New York. This done at Washington city, on the seventeenth day of July, in the year of our Lord one thousand eight hundred and sixty-two."

Specification 2d. "In this: that he, Brigadier-General William A. Hammond, Surgeon-General as aforesaid, did, on the thirtieth day of May, in the year of our Lord one thousand eight hundred and sixty-three, at Washington city, wrongfully and unlawfully prohibit Christopher C. Cox, as medical purveyor for the United States in Baltimore, from purchasing drugs for the army in said city of Baltimore."

Specification 3d. "In this: that he, the said Brigadier-General William A. Hammond, Surgeon-General, United States army, did unlawfully order and cause one George E. Cooper, then medical purveyor for the United States, in the city of Philadelphia, to buy of one William A. Stephens blankets, for the use of the Government service, of inferior quality; he, the said Brigadier-General William A. Hammond, then well knowing that the blankets so ordered by him to be purchased as aforesaid were inferior in quality, and that said Purveyor Cooper had refused to buy the same of said Stephens. This done at Philadelphia, in the State of Pennsylvania, on the twenty-eighth day of May, in the year of our Lord one thousand eight hundred and sixty-two."

Specification 4th. "In this: that he, the said Brigadier-General William A. Hammond, Surgeon-General as aforesaid, on the fourteenth day of June, in the year of our Lord one thousand eight hundred and sixty-two, at the city of Washington, in the District of Columbia, unlawfully, and with intent to aid one William A. Stephens to defraud the Government of the United States, did, in writing, instruct George E. Cooper, then medical purveyor at Philadelphia, in substance as follows:

"SIR: You will please purchase of Mr. W. A. Stephens eight thousand pairs of blankets, of which the inclosed card

is a sample. Mr. Stephens's address is box 2,500, New York. The blankets are five dollars per pair."

Specification 5th. "In this: that he, the said Brigadier-General William A. Hammond, Surgeon-General, United States army, on the sixteenth day of June, in the year of our Lord one thousand eight hundred and sixty-two, at the city of Washington, did corruptly, and with intent to aid one William A. Stephens to defraud the Government of the United States, give to the said William A. Stephens an order, in writing, in substance as follows: 'Turn over to George E. Cooper, medical purveyor at Philadelphia, eight thousand pairs of blankets;' by means whereof the said Stephens induced said Cooper, on Government account, and at an exorbitant price, to receive of said blankets, which he had before refused to buy, seventy-six hundred and seventy-seven pairs, and for which the said Stephens received payment at Washington in the sum of about thirty-five thousand three hundred and fourteen dollars and twenty cents."

Specification 6th. "In this: that he, the said Brigadier-General William A. Hammond, Surgeon-General, United States army, on the thirty-first day of July, in the year of our Lord eighteen hundred and sixty-two, at the city of Philadelphia, in the State of Pennsylvania, well knowing that John Wyeth and Brother had before that furnished medical supplies to the medical purveyor at Philadelphia, which were inferior in quality, deficient in quantity, and excessive in price, did corruptly, unlawfully, and with intent to aid the said John Wyeth and Brother to furnish additional large supplies to the Government of the United States, and thereby fraudulently to realize large gains thereon, then and there give to George E. Cooper, medical purveyor at Philadelphia, an order, in writing, in substance as follows:

"You will at once fill up your store-houses, so as to have constantly on hand hospital supplies of all kinds for two hundred thousand men for six months. This supply I desire that you will not use without orders from me."

"And then and there directed said purveyor to purchase a large amount thereof, to the value of about one hundred and seventy-three thousand dollars, of said John Wyeth and Brother."

Specification 7th.—"In this, that he, the said Brigadier-General William A. Hammond, Surgeon-General, United States army, about the 8th day of October, in the year of our Lord eighteen hundred and sixty-two, at Washington city, in contempt of, and contrary to the provisions of the act entitled 'An act to reorganize and increase the efficiency of the medical department of the army,' approved April 16, 1862, did unlawfully direct Wyeth and Brother, of Philadelphia, to send forty thousand cans of their 'extract of beef' to various places, to wit: to Cincinnati, St. Louis, Cairo, New York, and Baltimore, and send the account to the Surgeon-General's office for payment."

CHARGE 2d. "Conduct unbecoming an officer and a gentleman."

Specification 1st. "In this, that he, Brigadier-General William A. Hammond, Surgeon-General, United States army, on the thirteenth day of October, in the year of our Lord eighteen hundred and sixty-two, at Washington city, in a letter by him then and there addressed to Dr. George E. Cooper, declared in substance that the said Cooper had been relieved as medical purveyor in Philadelphia, because, among other reasons, 'Halleck,' meaning Major-General Henry W. Halleck, General-in-Chief, requested as a particular favor that Murray might be ordered to Philadelphia; which declaration so made by him, the said Brigadier-General William A. Hammond, Surgeon-General as aforesaid, was false."

An additional charge and specifications preferred against Brigadier-General William A. Hammond, Surgeon-General, United States army:

CHARGE 3d. "Conduct to the prejudice of good order and military discipline."

Specification 1st. "In this, that he, the said Brigadier-

General William A. Hammond, Surgeon-General, United States army, on the 8th day of November, A.D. 1862, at Washington city, did unlawfully order Henry Johnson, then medical storekeeper and acting purveyor at Washington city, to purchase three thousand blankets of one J. P. Fisher, at the price of \$5 90 per pair, and to be delivered to Surgeon G. E. Cooper, U. S. A., medical purveyor at Philadelphia."

A plea of not guilty was entered upon each of the charges and specifications, and after a full hearing of the testimony for the Government and the defence, and the examination of a large amount of documentary evidence, together with the consideration of the elaborate arguments of both sides, the court rendered a finding of guilty on all the charges, and sentenced the accused to be dismissed the service, and to be forever disqualified from holding any office of honor, profit, or trust, under the Government of the United States.

In reporting upon this case, the second charge—conduct unbecoming an officer and a gentleman—will be first considered.

Under this charge it was alleged that accused made a false declaration, in writing, that Dr. Cooper had been relieved from his position as medical purveyor at Philadelphia, because, among other reasons, General Halleck had requested, as a particular favor, that Dr. Murray might be ordered to duty in that city.

It appears from the evidence that, on the 8th of October, accused requested of the Adjutant-General that Dr. Cooper be relieved from duty as medical purveyor, at Philadelphia, by Dr. Smith. On the 13th he wrote a letter to Dr. Cooper, as follows:

"MY DEAR DOCTOR—I have just received your note. The detail for your relief from duty went to the Adjutant-General a few days since. I told Smith to tell you of it. It was with great reluctance, even with pain, that I made the detail. I am entirely satisfied with your energy, faithfulness, and acquaintance with your duty; but I found great complaints made in regard to your manners, which were constantly reiterated from medical officers and citizens of standing. I believe the change would have been made over my head had I not made it myself. I was forced to come to the conclusion that it was necessary to be done. Once before the detail was made, but I would not sign it, and this time it lay on my table several days. This is one reason. The second is even more imperative. Halleck requested, as a particular favor, that Murray might be ordered to Philadelphia. There was nothing for Murray to do there but to take your place, King's, or Smith's. The latter have both been in active service, and I thought it best to relieve you on that account.

"As A. K. Smith is, in my opinion, better suited to perform the duties of purveyor than Murray, I decided to make him purveyor, and Murray medical director of transportation.

"I assure you that, so far as your official action is concerned, I have not the least fault to find.

"Yours sincerely,

"W. A. HAMMOND."

General Halleck testified, substantially, that "to the best of his recollection," he never made any request of the accused to order Dr. Murray to Philadelphia; the only communication he ever made to him on the subject being a letter on the 1st of October, stating that Dr. Murray had served long and faithfully in the field, with the army in the West, and would like to be transferred to Eastern hospital duty, and asking the consideration of his case.

On the part of the defence, a letter from Dr. Murray to General Halleck, dated Louisville, September 27th, was submitted, in which Dr. Murray stated to General Halleck, that if he would request the Surgeon-General to order him to Philadelphia, it would "be done at once." And it was claimed by the accused—but not shown—that General Halleck, besides writing the letter of October 1st, in which he asked that Dr. Murray's desire to be ordered East on

"hospital duty" might be considered, also, in some personal interview, made a verbal request that he be assigned to that duty in Philadelphia.

The argument of the Judge Advocate on this charge may be found on pages 57 to 59 of his "Reply," and that of the counsel for the accused on pages 51 to 53 of the "Defence."

The findings upon the first and third charges involve questions of law as well as of fact.

It was contended by the accused (see pages 9 to 16 of the "Defence") that the Surgeon-General had the power to control all purchases of stores for his department; to order purveyors when, at what places, of whom, and at what prices they should procure them; and further, that he might purchase them himself.

It was submitted by the Judge Advocate (see pages 4 to 7 of his "Reply") that the acts of Congress of April 16, and July 17, 1862, limited the authority of the Surgeon-General to the direction when to purchase, and the kind and quantity to be procured; that, having given this direction, his lawful authority was determined, leaving to medical purveyors, under bonds for the proper discharge of their responsibilities, the whole duty of selecting in such markets, and of buying from such persons, and upon such terms as their judgment dictated.

The former of these enactments provides "that medical purveyors shall be charged, under the direction of the Surgeon-General, with the selection and purchase of all medical supplies, including hospital stores," &c., &c.

The latter makes provision that medical purveyors shall give bond, with approved security, in such sums as the Secretary of War shall require, for the faithful performance of their duties.

It would seem, from the express language as well as from the reason of the law, that the position taken by the Judge Advocate was correct, and the decision of the court upon this issue was warranted. But it is deemed unnecessary to bestow further consideration upon this question. The findings of the court, that the accused ordered the purveyors to purchase supplies of inferior quality, well knowing them to be such, and to purchase articles at exorbitant prices, with corrupt intent to aid in defrauding the Government, and that he ordered the purchase of "additional large supplies," "corruptly," and "with intent to aid" certain persons "fraudulently to realize large gains thereon," impute much more than a mere technical over-stepping of the limits of the enactment of April 16, 1862. They convict him of official corruption, abuse of power, and a gross breach of public trust.

The proof upon which these findings are based was offered in support of the 3d, 4th, 5th, 6th, and 7th specifications to the first charge. It is not requisite in this report to collate and comment upon it. The full presentation of the whole case by the Judge Advocate relieves this office of the necessity of entering into that detailed discussion of the facts and legal questions involved which, under different circumstances, would have been proper.

In his "Reply," and the "Defence" of the counsel for the accused, both of which are printed and attached to the record, the important portions of the evidence and all the prominent features of the proceedings, are presented as concisely as the voluminous character of the testimony would admit.

That the natural and necessary result of the acts of the accused, as established by the record, involved a criminal spoliation of the Government treasury, which would alone have called for his dismissal from the service, cannot be denied; but when it is remembered, as shown by the proof, that this spoliation was in part accomplished by the purchase of inferior medical supplies and stores—thus compromising the health and comfort, and jeopardizing the lives of the sick and wounded soldiers suffering in the hospitals and upon the battle-fields of the country—soldiers solemnly committed to the shelter and sympathies of the office held by the accused, by the very law and purpose of its

creation—it must be admitted that this fearfully augments the measure of his criminality.

The trial, which lasted nearly four months, was one of the most patient and thorough that has ever occurred in our military history; and the accused had throughout the assistance of eminent and able counsel in conducting his defence. The court, which was composed of nine general officers, at the close of this prolonged investigation, declared him guilty of the charges preferred, and awarded the punishment which, in their judgment, was in accordance with the nature and degree of the offences committed; and a careful examination of the record leaves no room for doubt as to the validity of the proceedings, or the justness of the findings and sentence.

J. HOLT,
Judge Advocate General.

The following is the President's order confirming the sentence in this case:

"The record, proceedings, findings, and sentence of the court in the foregoing case are approved; and it is ordered that Brigadier-General William A. Hammond, Surgeon-General of the United States Army, be dismissed the service, and be for ever disqualified from holding any office of honor, profit, or trust under the Government of the United States.

"A. LINCOLN.

"August 18, 1864."

Army and Navy.

CIRCULAR NO. 4.

OFFICE OF COMMISSARY GENERAL OF PRISONERS,
WASHINGTON, D.C., August 10, 1864.

I. By direction of the Secretary of War, it is ordered that hereafter no supplies of any kind will be furnished to Prisoners of War by their relatives or friends, except in cases of illness, when near relatives will be permitted to send them such articles of food as may be approved by the Surgeon in charge of the Hospital, to whose care they will in all cases be addressed. Necessary clothing may also be furnished by near relatives to destitute Prisoners, subject to the approval of the Commanding Officer of the Post where they are confined. Outer garments must be of grey or dark mixed color, and of inferior quality. Only one suit of outer clothing and a change of under clothing will be allowed.

II. It is further ordered that Sutlers at Military Prisons shall be permitted to sell to Prisoners only the following articles, viz: Writing Materials, Postage Stamps, Tobacco, Cigars, Pipes, Matches, Combs, Soap, Tooth-brushes, Hair-brushes, Scissors, Thread and Needles, Handkerchiefs, Towels, and Pocket Looking-glasses.

III. This order will not be understood as prohibiting Prisoners of War from receiving clothing or other articles not contraband from their relatives or friends residing beyond our lines, when forwarded by Flag of Truce Boat, or any other authorized channel, so long as the Prisoners of War held at Richmond, and other Southern Prisons, are permitted to receive the same articles, in the same manner, from their relatives and friends in the loyal States.

W. HOFFMAN,

Col. 3d U. S. Infantry, Com. Gen. of Prisoners.

GENERAL ORDERS, NO. 100.

HEADQUARTERS, DEPARTMENT OF THE GULF.
NEW ORLEANS, July 24, 1864.

In accordance with orders from Headquarters Military Division of the West Mississippi, no resignations of Medical Officers serving within the limits of this Department will be accepted except by reason of incompetency or disability from sickness, and in those cases only after an examination and recommendation has been made by a Board of Medical Officers.

By Command of Major-General Banks:

GEORGE B. DRAKE,
Assist. Adjutant-General.

GENERAL ORDERS, NO. 26.

HEADQUARTERS, DEPARTMENT OF THE NORTHWEST.
MILWAUKEE, WISCONSIN, Aug. 9, 1864.

I. Surgeon Ebenezer Swift, U. S. Army, having reported at these Headquarters, in accordance with Special Order No. 206, June 13th, 1864, War Department, Adjutant General's Office, is announced as Medical Director of the Department, and will be obeyed and respected accordingly.

II. In relieving Surgeon T. M. Getty, U.S.A., from duty as Medical Director, in order that he may comply with orders received from the War

Department, the Major-General Commanding desires to bear testimony to the ability and fidelity with which he has performed his duties in this Department, and to express his regret that the demands of the service should have rendered it necessary that he should be relieved from duty at these Headquarters. To his new field of duty Surgeon Getty will carry with him the kind feeling and warm interest of his brother officers in this Department.

By Command of Major-General Pope:

J. F. MELINE,
Acting Assist. Adjutant-General.

ARMY.

ORDERS, CHANGES, &c.

APPOINTMENTS.

Dr. P. R. House, of New York, to be Surgeon 23th U. S. Colored Troops. Elias W. Ilope, John Cotterell, O. P. Foster, Samuel Horner, R. G. Mauss, N. F. Brown, and C. A. Dorman, U.S.Vols.; C. B. Parkhurst, of Washington, D.C., J. M. Henry, of Conn., and G. A. Francis, of New York, to be Hospital Stewards, U.S.A.

DISCHARGES.

Surgeon J. B. McPherson, 19th U. S. Colored Troops, honorably discharged on tender of his resignation and recommendation of his superior officers.

Hospital Steward E. B. Lindsay, U.S.A., honorably discharged to accept a commission in the U. S. Colored Troops.

RESIGNATION.

Surgeon H. A. Schlaeflin, U.S.V., August 16, 1864.

LEAVE OF ABSENCE.

Medical Inspector A. C. Hamlin, U.S.A., for thirty days.

Surgeon E. McDonnell, U.S.V., for thirty days.

Surgeon J. R. McClurg, U.S.V., for fifteen days.

ORDERS.

A Board of Officers to consist of Surgeon E. H. Abadie, U.S.A., Surgeon W. J. Sloan, U.S.A., Assist.-Surgeon E. S. Dunster, U.S.A., will assemble at West Point, New York, on the 29th inst., for the examination of such new Cadets as may then present themselves for admission into the Military Academy.

Surgeon Alonzo J. Phelps, U.S.V., is relieved from duty in the Army of the Potomac, and will report in person to the Surgeon-General for assignment to duty.

Surgeon Charles Page, U.S.A., is relieved from duty in the Dept. of Washington, and will report to the Commanding General, Army of the Potomac, for assignment to duty.

Surgeon R. W. Pease, U.S.V., is relieved from duty in the Army of the Potomac, and will report in person to the Commanding General, Middle Department, for assignment to duty.

ASSIGNMENTS.

Surgeon J. C. Whitehill, U.S.V., as Surgeon in charge, Maine Hospital, Cincinnati, Ohio.

Surgeon Zenas E. Bliss, U.S.V., to temporary duty as Medical Purveyor, Baltimore, Md.

Surgeon C. F. H. Campbell, U.S.V., as Medical Director, 3d Separate Brigade, 8th Army Corps.

Surgeon J. H. Grove, U.S.V., as Surgeon in charge, General Field Hospital, Army of the Tennessee, Rome, Ga.

Assistant Surgeon E. O. Brown, 26th Kentucky Vols, as Surgeon in charge, Military Prison, Louisville, Ky.

MISCELLANEOUS.

Hospital Steward William H. Berry, U.S.A., on duty at Main Street General Hospital, Covington, Ky., is reduced to the ranks and will report to the Commanding Officer at Newport Barracks, Ky., as a general service recruit.

Permission to remain in Washington, D.C., under medical treatment, has been granted Assistant-Surgeon John S. Billings, U.S.A.

Permission to repair to his home for medical treatment, has been granted to Surgeon Fowler Prentice, 73d New York Vols.

NAVY.

Regular Navy.

Passed Assistant-Surgeon A. W. Hawkins, detached from the Naval Asylum, Philadelphia, Pa., and ordered to the St. Mary's.

Assistant-Surgeon George D. Sloan, detached from the Saranac and ordered north.

Assistant-Surgeon John T. Luck, detached from the St. Mary's and ordered to the Saranac.

Passed Assistant-Surgeon A. Hndson, detached from the Naval Asylum, Philadelphia, Pa., and ordered to the North Atlantic Squadron.

Assistant-Surgeon Frederick Krecker, detached from the Naval Hospital, Norfolk, Va., and ordered to the West Gulf Squadron.

Assistant-Surgeon James J. Allingham, detached from the Conemangh and ordered north.

Assistant-Surgeon W. H. Westcott, ordered to the North Atlantic Squadron.

Assistant-Surgeon Charles L. Green, ordered to the West Gulf Squadron.

Assistant-Surgeon A. A. Hoebling, ordered to the Naval Asylum, Philadelphia, Pa.

Volunteer Navy.

ACTING ASSISTANT-SURGEONS.

S. R. Boyce, detached from the Massasoit and awaiting orders.

Roland E. Woodward, detached from the Ohio and ordered to the Commodore Perry.

J. E. Warner, leave of absence extended.

H. K. Wheeler, ordered to the Yantic.

C. Sturtevant, orders to the Yantic revoked, and waiting orders.

Samuel B. Hoppin, appointment revoked.

Original Lectures.

LECTURES ON THE

TREATMENT OF STONE IN THE BLADDER,

DELIVERED BEFORE THE CLASS IN THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF THE CITY OF NEW YORK.

By ALFRED C. POST, M.D.

LECTURE II.

GENTLEMEN:—In my last lecture I gave you my views with regard to the subject of Lithiatri, or the medical treatment of stone in the bladder. I proceed now to the second division of our subject, viz. Lithebolus. This term is derived from the Greek words, *λίθος* a stone, and *ἐκβάλλω* I cast out. I have employed it to designate the expulsion of a stone from the bladder with the stream of urine. This is often accomplished spontaneously. But inasmuch as the process is greatly facilitated by artificial assistance, I have deemed it proper to include it among the methods of treatment to which the attention of surgeons should be particularly directed. As this is the mildest and safest of all the methods by which a stone may be removed from the bladder, it should be resorted to by surgeons in all appropriate cases. Unfortunately, the cases to which it is applicable are comparatively few, including only those in which the stone is of small dimensions. It rarely happens that a calculus much larger than a cherry-stone or a pea is expelled in this manner through the male urethra. But females have occasionally passed calculi of very considerable size. The spontaneous expulsion of a calculus through the male urethra usually occurs within a few days after its passage from the kidney through the ureter into the bladder. In all cases, therefore, of nephritic colic, when the pains attending the transit of a stone through the ureter have ceased, and there is reason to infer that the stone has escaped into the bladder, the patient should pass his urine into a vessel, so that if the calculus be expelled from the bladder, its presence may be detected. If it should not make its appearance within two or three days, artificial assistance shall be given to promote its expulsion. A full-sized bougie should be passed through the urethra, so as to accustom the part to the presence of a foreign body, and to produce a moderate dilatation of the canal. If the introduction be accomplished with ease, and without much pain to the patient, it may be daily repeated. When the canal has been sufficiently dilated, the patient should make a free use of diluents, and should retain his urine until the bladder has become somewhat distended. He may then take a warm bath, to produce muscular relaxation, in order that the stone may not be arrested by undue contraction of the sphincter of the bladder. When these preliminary steps have been taken, the patient may place himself on his hands and knees, and, grasping and compressing the extremity of the penis, make an effort to expel his urine. He may then release his hold upon the penis, and allow the urine to gush out in a full and forcible stream. If the first trial should fail to expel the stone, the same process may be repeated. But after three or four unsuccessful attempts, this plan should be abandoned, and one of the other methods should be resorted to.

The third method of removing a stone from the bladder I have denominated Lithospasty. The term is derived from *λίθος* a stone, and *σπάω* I draw. This term designates the extraction of the stone with some instrument passed through the urethra. It is applicable to the removal of stones somewhat larger than those which can be expelled by the contractions of the muscular coat of the bladder; but it is not generally capable of being carried into execution when the transverse diameter of the stone exceeds half an inch. It is, next to lithebolus, the mildest and safest method of relieving the bladder from the presence

of a stone. It should therefore be resorted to in all cases in which the stone is too large for lithebolus, and sufficiently small to be extracted through the urethra without much force. The ancient Egyptians were in the habit of extracting calculi from the bladder by introducing a finger into the rectum, and pressing the stone into the prostatic portion of the urethra, and then passing a wooden canula through the urethra down to the stone, and sucking upon the extremity of the canula. Prosper Alpinus, in his work entitled "*Medicina Ægyptiorum*," describes the process. The Egyptians were in the habit of dilating the urethra, previously to the extraction, by the insufflation of air. Prosper Alpinus says that he saw an Arab physician extract, in this manner, a calculus as large as a small Madeira nut. Instances are related in which calculi have been extracted through the urethra by direct suction upon the extremity of the penis. Gross suggests that the air could be exhausted from a tube in contact with the stone, more advantageously with a syringe than with the mouth. The most approved method of lithospasty is with the urethrovessical forceps. Sanctorius describes a forceps for this purpose, having three branches which are made to expand by means of a stilet gliding in its interior. When the surgeon experienced difficulty in seizing the stone, Sanctorius directed a vacuum to be made in the canula with a syringe, that the stone might thus be drawn between the branches. (Sanctorius Commentaria. Venet. 1626.) Severinus describes another three-branched forceps for extracting calculi, suggested by Johannes Germanus. (Severinus de Efficaci Medicina, cap. cxxxv. pars ii. de Sectionibus.) Hales constructed a forceps for extracting small calculi. Dessault proposed a similar instrument, but of greater length, for extracting small stones and foreign bodies from the bladder. Sir Astley Cooper extracted from a man's bladder eighty-four calculi about the size of peas. He used a steel sound bisected longitudinally at its extremity, having an ivory handle, and an arrangement by which the blades could be opened or closed by pressing a spring. (Medico-Chirurg. Transactions, vol. ii. p. 349.) This instrument was made by Mr. Weiss, at the suggestion of Sir Astley Cooper. A somewhat similar instrument was found in the ruins of Herculaneum. M. Leroy d'Etiolles states as an objection to this instrument, that the operator has no means of knowing whether he has seized the stone until he begins to withdraw the instrument. Mauquest de Lamotte, by a fortunate accident, succeeded in extracting a large pin from a woman's bladder by means of a catheter, the head of the pin being caught in the eye of the instrument. (Obs. 322.) Boyer, in like manner, caught a calculus in the eye of an elastic catheter, and extracted it. A small duck-bill lithotrite is perhaps the most convenient instrument for the extraction of a calculus through the urethra. With such an instrument I have repeatedly extracted fragments of a stone which I had previously crushed. Before attempting lithospasty, the urethra should be accustomed to the contact of instruments, and moderate dilatation should be effected by means of bougies. The lithotrite or forceps should then be cautiously introduced, and when it comes in contact with the stone its blades should be opened, and the stone seized and extracted. When a stone has been seized and drawn into the urethra, and has been arrested in some portion of the canal, it may be pushed back into the bladder. An effort may then be made to seize it in a more advantageous position, which will perhaps allow it to be extracted. If the stone should be arrested near the external orifice of the urethra, an incision may be made to favor its extraction.

The fourth method of removing a stone from the bladder is by the action of solvents injected into the bladder. I have named this method Litholysis; the word being derived from *λίθος* a stone, and *λύω* I dissolve. Most of the different kinds of urinary concretions have their appropriate solvents, which can be readily used in the laboratory of the chemist, and by which a solution can be effected in a short time. But the bladder will not tolerate the pre-

sence of these powerful chemical agents. The great desideratum, then, in the injection of solvent fluids into the bladder, is to accomplish the solution of the stone without inflicting serious injury upon the coats of the bladder. The solvents, therefore, require to be diluted to such an extent as to make the process of solution necessarily a very tedious one. The difficulties arising from this circumstance are such as to have prevented this method of treatment from being extensively introduced into practice.

Baronius, in 1614, recommended emollient injections into the bladder, to relieve the irritation occasioned by stone. He directed, for this purpose, oil of almonds, decoction of marsh-mallows, &c. He also advised the injection of lemon-juice, deer's blood, and other fluids as solvents. Hales made a number of experiments, injecting dilute acids and alkalis into the bladders of animals, showing their tolerance of those agents. (Statics of Animals.) Langrish made similar experiments. (Physical Experiments on Brutes. London: 1746.) Butler contrived an apparatus with which he injected lime-water into the bladder. (Butler, A Method of Cure for the Stone, chiefly by Injections. Edinburgh: 1754.) Rutherford, in 1753, had tried this apparatus on a Scotch Highlander. A large stone had been recognised by sounding. Four or five ounces of lime-water were injected morning and evening; the same remedy was given by the stomach. After four months' treatment the pains had entirely disappeared, and no stone could be detected by sounding.

Fourcroy and Vauquelin demonstrated the solvent powers of a solution of potassa on calculi of uric acid and water of ammonia; also, of dilute hydrochloric acid on calculi composed of phosphates, and of dilute nitric acid on calculi composed of oxalate of lime. Ineffectual efforts have been made by different parties to envelop calculi while in the bladder in pouches of some material which will not be acted on by the chemical agents which are designed to dissolve the stone. These pouches were intended for the protection of the bladder. Hales, in his Statics of Animals, described an apparatus which he had contrived for injecting liquids into the bladder in a continuous current. In 1821, J. Cloquet improved upon the apparatus of Hales. He proposed injecting distilled water instead of more active chemical agents. Guirhuixen, in the Salzburger Med. Chirurg. Journal, in 1813, had also published an account of another modification of Hales's apparatus. M. Leroy d'Etiolles suggests the expediency of combining solvent injections into the bladder with lithotripsy. The best instrument for injecting liquids into the bladder, in a continuous current, is a large golden catheter with a longitudinal septum dividing its interior into two semi-cylindrical cavities, each of which communicates with one of the eyes of the instrument. The extremity of the instrument most remote from the body is divided into two cylindrical branches, which diverge from each other like the branches of the letter Y. The liquid is injected through one branch into the bladder, and escapes through the other into a basin.

The solution of calculi, by means of liquids injected into the bladder, seems to be of very limited application in practice. The solution of concretions of oxalate of lime, or of uric acid, or water of ammonia, by means of such solvents as the bladder will tolerate, is so slow a process as to render it of no value in practice. Calculi composed of phosphates may be acted on by dilute mineral acids somewhat more promptly. The bladder will tolerate injections of nitric acid of the strength of two drops to the ounce of water, and injections of this strength through a canula may be kept up for a sufficient time to produce a decided impression on the calculus. And if the concretion be of small size, a cure may thus be effected without great loss of time. When a phosphatic calculus is disintegrated by lithotripsy, the injection of dilute nitric acid may hasten the cure.

Dr. Nöcgerath, of this city, has proposed the injection of a solution of acetate of lead for the purpose of disinte-

grating phosphatic calculi by double electric affinity. He represents that the bladder tolerates the presence of this agent better than that of dilute nitric acid, and that its action on the calculus is more efficacious and more speedy.

Prof. Percy, of this city, recommends healthy urine as a solvent of urinary calculi, and alludes to two cases in which the injection of that fluid into the bladder was said to be successful in effecting a solution of calculi, whose presence in the bladder had been previously detected.

The fifth method of relieving the bladder from the presence of a stone is by the dilatation of the urethra and of the neck of the bladder to such a degree as to allow the extraction of the stone. This method has been denominated *Lithectasy*, from *Λιθος*, a stone, and *εκτασις*, dilatation. A moderate degree of dilatation of the neck of the bladder, and of the urethra, constitutes an auxiliary part of nearly all the mechanical methods of removing stones from the bladder, as in many cases of lithocoly, lithospasy, lithotripsy, and lithotomy. But the term "*lithectasy*" is only employed to designate the treatment of those cases in which the dilatation is carried to a very considerable extent, so that it constitutes the principal means of treatment. The process of dilatation, as applied to the whole length of the urethra, in the male subject, is of very limited application. The canal does not ordinarily admit of any great degree of dilatation; and this method is therefore only applicable to the extraction of stones of very moderate size, not much exceeding half an inch in diameter. It is therefore to be regarded as a mere auxiliary to lithospasy. There may be some exceptional cases in which a greater degree of dilatation can be effected.

Lithectasy in the female is capable of much more extended application. The short and straight urethra of the female is susceptible of a great degree of dilatation, so that a stone as large as a hen's egg may be extracted through it. But if the dilatation be effected too rapidly, or if it be carried too far, it is apt to be followed by persistent incontinence of urine, subjecting the patient to the greatest inconvenience, isolating her from social enjoyments, and often making life a burden to her.

The name "*lithectasy*" has also been applied to a complicated operation for stone in the male subject, in which an incision is made through the perinæum into the membranous part of the urethra; and the neck of the bladder and the prostatic part of the urethra are gradually dilated to such a degree as to allow the extraction of the stone. The term *lithectasy* has been, I believe, limited to those cases in which, through a perineal incision, the prostatic portion of the urethra and the neck of the bladder have been somewhat gradually dilated. When the dilatation has been effected rapidly, as in the old operation known as the apparatus major, or as in the modern method practised by Allerton and by Professor Markoe of this city, the method has been regarded as one of the varieties of lithotomy. In this rapid dilatation, there is probably, in most cases, a considerable amount of laceration. Gradual dilatation, in connexion with a perineal incision into the membranous part of the urethra, was first recommended by Willis. The operation has been performed in a very few cases, and its results have not been such as to render it probable that it will ever gain much favor with the profession. Gradual dilatation through a wound of the perinæum, continued for some time after inflammatory action has commenced, must necessarily be a source of much irritation; and I am strongly inclined to the opinion that better results can be obtained from lithotripsy or lithotomy.

A WEST INDIA paper has the following:

Extraordinary and Happy Discovery for Humanity.—One quart bruised Pimento soaked in one gallon of Brandy or other spirits for one week, or longer, is a great and powerful antidote to Cholera, or other Diarrhetic affections. A drachm-glass, with an equal quantity of boiling water and sugar, gives sure relief.

Original Communications.

CEREBRO-SPINAL MENINGITIS, OR SPOTTED FEVER.

By WM. H. DRAPER, M.D.

PHYSICIAN TO THE NEW YORK HOSPITAL.

(Concluded from page 99.)

THE *duration* of the disease varies considerably in different epidemics and in the same epidemic. In Carbondale, many cases terminated within twelve hours. The shortest period in which I was cognizant of a fatal termination was seven hours; twenty hours was the minimum period in the cases reported by Mr. Tourdes, while some cases were prolonged to eighty, ninety, and one hundred days; these were, of course, rare exceptions. In the epidemic at Carbondale, fatal cases seldom lasted more than four days, while those which exceeded this period were more apt to terminate in recovery. Dr. Burr, of Carbondale, informs me that the fatal cases have ranged from seven hours to seven weeks. Probably the majority of the fatal cases have proved so within forty-eight hours. No author, with the exception of Dr. Fish, has ever observed cases of relapse or recurrence.

We come now to the consideration of the anatomical lesions observed in this disease. As might be inferred from the symptomatology, the characteristic lesions are found in the meninges of the brain and spinal cord. In cases which are rapidly fatal, the lesion consists simply in an intense engorgement of the sinuses, veins, and minute vessels of the pia mater, with a varying amount of serous subarachnoid and ventricular effusion. In more protracted cases, the pathological changes are such as indicate acute inflammatory action, and they vary according to the intensity of this process. In some cases the meshes of the pia mater are filled with an effusion of lactescent sero-purulent effusion; in others, the arachnoid is lifted, and the surface of the brain obscured by a layer of consistent greenish pus; in others again, more or less diffused patches of lymph are observed. These inflammatory exudations are sometimes confined to the surface of the convolutions, sometimes to the base of the brain, and in many instances are found in both localities; they are especially observed along the course of the large vessels. Purulent effusion has been found in the ventricles, and occasionally superficial softening of the ventricular walls. This was very marked in one of the autopsies made at Carbondale. The same lesions observed in the cerebral meninges are found in those of the cord, where the case has been accompanied with spinal symptoms. They may exist along the entire length of the cord, or be confined to a particular portion; in the latter case they are more apt to be observed, according to the experience of Mr. Tourdes, in the lower "than in the upper portion of the cord." So far as the substance of the brain and cord is concerned, the changes are not especially marked or uniform. In one of the cases examined at Carbondale, the brain seemed swollen, and the substance, especially of the surface of the convolutions and the ventricular walls, appeared to be much softened. This softening of the cerebral substance is mentioned as characterizing the fatal cases in the epidemic at Avignon, in 1839, described by M. Chauffard, and that of Orleans, in 1848, described by M. Corbin. But though the characteristic lesions of this malady are cerebro-spinal, they are not always the only lesions, and the importance of this fact will be appreciated when we come to consider the question of the pathology of the disease. In all the epidemics of this malady where the post-mortem appearances have been fully and accurately observed, we have evidence of the lesions affecting the serous and synovial membranes throughout the body. M. Boudin, who had a very large experience in the epidemics that prevailed in France from 1837 to 1844, insists upon

the not infrequent occurrence of purulent deposits in almost all the serous and synovial cavities. He especially advises examination of the sac of the tunica vaginalis. M. Billery, physician-in-chief of the hospital at Grenoble, speaks particularly of the pleural and synovial lesions in the epidemic which he observed in 1832. In two of the four dissections made by Dr. J. C. Warren, of Boston, in 1810, there were thoracic lesions; in one double pleurisy, with extensive purulent deposit, and in the other evidences of pericarditis. In a letter recently received from Dr. Ottman, of Carbondale, he informs me that he has had a number of cases of effusion within the knee-joint, one case of pericarditis, two or three of pleurisy, and one case, in a child sixteen months old, of extensive ascites. Dr. Ottman also mentions the occurrence, in a number of convalescent cases, of extensive abscesses and dropsical effusions. M. Billery alludes to parotid swellings, and to axillary and inguinal buboes, as complications of this disease.

It is also proper to state in this connexion, that in a microscopic examination of the liver and kidneys of four cases, more or less marked fatty degeneration was observed. Two of these cases were children, and two healthy adults. In none of them had there been any antecedent evidence of renal disease. The case in which the change was most marked was that of a vigorous little girl, fourteen years of age, who was ill only forty-four hours. The degeneration was also distinct in the liver, in a child who died after a sickness of seven hours. The significance of these degenerative changes will be examined when we come to speak of the pathology of the disease under consideration.

The occurrence of ecchymotic stains upon the pleura and pericardium has been repeatedly noted among the post-mortem appearances. The changes in the blood in this disease have not been carefully studied. The blood drawn during life has generally been described as dark and fluid, the coagula having little consistence. These characteristics were marked in the blood of the two bodies I examined at Carbondale. M. Maillot, physician-in-chief of the military hospital at Lille, gives the results of the analyses of the blood in six cases made by M. Coulier; in all these the fibrine was found increased to six parts and over in the thousand. It is to be remarked, however, that these analyses were all made of blood taken at the second and third venesection, when the proportion of fibrine would naturally be increased.

The question of the diagnosis of cerebro-spinal meningitis, especially in its epidemic form, need not detain us long. The striking features of the disease are such as distinguish it unmistakably, in most instances, from every disease with which it is likely to be confounded. The cases which are sudden in their onset might possibly be mistaken in a malarious region for cases of pernicious fever; but pernicious fever is rarely fatal in its first paroxysm, and the reaction which it presents is entirely unlike that which occurs in meningitis. The rapidly fatal cases which present tetanic symptoms might also be confounded with idiopathic tetanus, but in tetanus the cerebral symptoms are usually slight, and sometimes absent, never comparable with those which characterize cerebro-spinal meningitis. The cases of epidemic meningitis which are protracted, and of a lower grade of severity, might be mistaken for typhoid fever; but the character of the eruption, which always appears early in this disease, and the absence of intestinal complications, suffice to distinguish them. Between cases of sporadic and epidemic cerebro-spinal meningitis, no distinction can be drawn excepting by the eruption.

The *prognosis* of this disease, in its epidemic form, is always grave, though considerable difference in the mortality appears in different epidemics. By M. Lefevre the mortality observed in the prisons of Rochefort in 1839 was at the beginning of the epidemic eighty per cent.; subsequently it was reduced to sixty per cent. M. Chauffard, at Avignon, lost twenty-nine of the first thirty cases committed to his charge. From the reports made to the Mass. Med. Society, in 1810, it appears that at the beginning of

the epidemic in Worcester county, a large proportion of the cases proved fatal; as it extended, the violence of the cases diminished, and the proportion of deaths became very small. As yet no accurate statistics of the mortality of the disease in Carbondale have been obtained. It will probably not be much less than fifty or sixty per cent. According to M. Tourdes, the fatality after the age of thirty is frightful. The disease also proves very fatal among young children.

The question of the treatment of this fearful malady is one that those who have read much of its history, or learned the lessons drawn from experience, must approach with great diffidence and discouragement. We shall glance briefly at the various plans of treatment suggested by different authorities. The antiphlogistic method, based upon the theory that the disease is a phlegmasia, has had numerous advocates. M. Tourdes, M. Maillot, and others, gave it a fair trial at Strasbourg and Lille. "Bloodletting," says M. Tourdes, "has been the basis of our treatment. We have used bloodletting from the arm, the jugular vein, and the temporal artery, and locally leeches and wet cups. We have bled, according to circumstances, from one to four times to the extent of from ten to eighteen ounces, applying in addition from fifty to two hundred leeches, from eight to twenty-four wet cups, and from thirty to one hundred and fifty dry cups. The leeches were applied to the temples, to the jugular and mastoid regions and the back of the neck; the cups along the whole extent of the vertebral column." The success of this treatment could not have been very encouraging, inasmuch as the mortality in M. Tourdes' experience amounted to more than sixty per cent. With the present views of bloodletting, even admitting the disease to be a phlegmasia, it can hardly be supposed that the mortality would have exceeded this percentage had the bloodletting been omitted. If it be established that the disease is a fever, and dependent upon a general blood-poisoning, venesection must be abandoned, no less on theoretical grounds than from the results of experience. Local bloodletting, however, from the temples, the back of the neck, and along the spine, deserves consideration, as having more control over local congestions in an adynamic disease than general bleeding.

Emetics and purgatives have of course been extensively employed as accessories in an antiphlogistic plan of treatment, and the question of their utility must be decided according to that of bloodletting.

Most authorities agree in recommending cold to the head and along the spine, either by ice or cold compresses, or by irrigation. Extensive use has been made also of revulsives, sinapisms, frictions with cayenne, and blisters to the back of the neck and along the spine. No discussion as to the merits of such applications is necessary, for though they may not in many cases be of essential service, they doubtless are in some, and they are not open to the charge of being adjuvants to the disease.

One of the remedies which has been most extensively used in this country, and which has secured in a large degree the confidence of the people and the approval of physicians, is the production, at as early a period in the disease as possible, of profuse diaphoresis. This is accomplished in various ways: by hot baths, by enveloping the patient in sheets soaked in a hot infusion of hemlock, and surrounding him with hot bricks or billets of wood; or, if convenient, by the hot-air bath. This sweating process is kept up from twelve to twenty-four hours, and in many instances seems to have a prompt and salutary effect. It is undoubtedly a powerful revulsive, and provided the strength be kept up by a proper administration of stimulants, can do no harm. The remedies thus far mentioned may be all classed as antiphlogistic, and their use, as before stated, is founded upon the theory that the disease is inflammatory. A different method of treatment is based upon the opinion that the disease is pathologically allied to the malignant fevers. M. Chauffard, of Avignon, after a fair but very unsatisfactory trial of the antiphlogistic plan, made

opium the basis of his treatment. He used the remedy in large doses, and if his own record of his experience is to be trusted, the result was gratifying, more than half of his cases recovering, and those which were fatal having their distressing symptoms much ameliorated. M. Chauffard's experience, if it proves nothing more, shows that, in his hands at least, the opium treatment was a great improvement on the bloodletting. In this country I am not aware that opium has had a fair trial. Drs. Ottman and Burr, of Carbondale, have used it to some extent, but if I am rightly informed, rather as a means of controlling the symptoms temporarily than as a specific remedy, adopted at the outset and systematically pursued.

In some of the first cases which occurred at Carbondale, *quinine* in large doses, with diffusive stimulants, constituted the basis of treatment. In one case of extraordinary severity it was followed by a successful issue, though the patient was delirious for ten days, and recovered with complete loss of hearing and locomotor ataxia of the lower extremities. The remedy was tried by the French physicians, and appeared to have some success in regions where it assumed an intermittent type, as at Rochefort; but it has few advocates at the present day, and in the experience of the physicians of Carbondale was soon abandoned as aggravating the nervous symptoms, and producing no other positive effects. The same remarks are applicable to the use of alcoholic stimulants in excessive quantities. Moderate stimulation with food, with a view of sustaining the strength, is all that experience justifies.

In reviewing the subject of treatment, the chief point worthy of consideration seems to be the utility of opium. The remedy is doubtless one, in its application to this disease, against which very grave and just theoretical objection may be urged. To use opium in a malady where there is already intense cerebral congestion, seems to be adding fuel to an already consuming fire. At the same time, experience has so often destroyed the most reasonable and strongly intrenched theories, that it has come to be irrational at the present day to defend any opinion or principle in therapeutics with purely theoretical arguments. The utility of opium in peritonitis is one of the best attested facts in modern therapeutics, and it becomes us to consider, in view of the experience of M. Chauffard, whether in this fatal form of arachnitis, in those cases at least which survive the shock of the attack, opium may not be serviceable in controlling the inflammatory action.

The Etiology of cerebro-spinal meningitis yet remains to be considered. In every epidemic, attempts have been made to ascribe the origin of the disease to some peculiarity in the locality in which it appeared, or to some modification of the usual meteorological influences. Such attempts have all proved unavailing. The disease has raged with as much fatality in the primitive regions of New England as on the shores of the Mediterranean; on bleak and unprotected hills as in sheltered and secluded valleys. Equally unsuccessful has been the effort, though physicians have not yet ceased to make it, to ascribe this malady to some unhealthy article of food or to insufficient diet; but inasmuch as the wealthy and refined are not altogether exempt from this fatal scourge, such hypotheses should long since have been abandoned.

I am indebted to Dr. Charles Burr for the following observations upon this subject, in relation to the epidemic at Carbondale. He says: "There is no apparent reason why it should have prevailed among us any more during the past than during any previous season. The disease has been confined to the west side of this spur of the Alleghenies, known as the Moosic range, and the two places where it has prevailed most extensively and with the greatest fatality, viz. Carbondale and Clark's Green, are as dissimilar in every point of view as any two places you can find in Northern Pennsylvania. In location, elevation, soil, appearance and make-up of country, population, business, habits of the people, and in fact in everything you may name, the two places are very unlike." In France the

disease showed a predilection for cities where there were garrisons, and was confined almost exclusively to the south of France. In Ireland it occurred chiefly in some of the workhouses.

The question of contagion in this malady is one of great interest and importance. Most authorities agree that it is non-contagious. This, I believe, is the conclusion, without exception, of all observers of the disease in this country. Drs. Burr and Ottman of Carbondale are emphatic in their statements in regard to this point. They believe it to be non-contagious. M. Blondin, who believes the disease to be a form of typhus, and whose experience was mainly among soldiers, is convinced of its contagiousness.

There are two important and interesting questions touching this disease that remain to be discussed—Is cerebro-spinal meningitis a fever or a phlegmasia? and, if a fever, is it a fever *sui generis*, depending upon a specific virus? or, is it allied to typhus, *i. e.* a disease having a similar origin, but characterized by distinct and peculiar lesions.

In order to present this question fairly, let us examine critically the analogies which are suggested by the consideration of the etiology, symptoms, and lesions of the two diseases; and first, what points of similarity are exhibited by an examination of the recognised causes of typhus and cerebro-spinal meningitis. The predisposing causes of the two diseases present no more marked analogies than are often found between diseases that are distinctly dissimilar, if we except the effects of overcrowding and bad ventilation. These latter are recognised as potent predisposing agencies in the production of typhus, and we think that historical evidence will show that the same influences are observed in the epidemics of cerebro-spinal meningitis. The coincidence of typhus with periods of warfare and famine is well known, and the same fact has been observed frequently in the history of cerebro-spinal meningitis. In France the disease occurred almost exclusively among the new recruits in the garrisoned cities in the south of France, and in Algeria. In Dublin the disease was exclusively confined to the workhouses; and in this country, as is well known, cerebro-spinal meningitis, and its congener, typhoid pneumonia, carried off a large number of soldiers in this State, on the shores of Lake Champlain, and in Canada. It occurred, to be sure, at that time, and has occurred since extensively among the civil population; but if the contagiousness of the disease can be established, this fact can be readily explained. In the recent epidemics, that at Brattleboro' began among the soldiers in the receiving barracks; the cases in the naval hospital at Brooklyn came from the receiving ship North Carolina, which has been excessively crowded ever since the war began. The epidemic at Carbondale broke out among the mining population, who live in small, overheated, and ill-ventilated houses, and may have been of spontaneous origin, or perhaps imported into the city by soldiers. There is no evidence to support this latter supposition, except the fact that a company of soldiers was quartered there for some time last fall, and not far from the locality where the disease raged with greatest fatality. Some cases of this disease occurring in camp have come to our knowledge from very reliable authority, and it is to be hoped that the subject of the possible importation of this form of fever from military camps and hospitals may be thoroughly investigated. The coincidence of the epidemics of this fatal disease with the periods of great military operations is surely something more than accidental, and deserves close and careful examination.

The recognised *exciting cause* of typhus is a specific poison exhaled from the bodies of those previously infected, or generated *de novo*. The nature of this poison is, of course, unknown, but its origin is probably unquestionable. Of the nature of the exciting cause of cerebro-spinal meningitis we know as little as of that of typhus, but if there is reasonable ground for ascribing them to a similar origin, we may justly suppose that they are similar in kind; and, in the first place, what evidence is there that cerebro-spinal

meningitis is a communicable disease? for unless the fact of origin by contagion can be established, there is an end to all analogy between the two diseases. The majority, it not the weight of authorities on this point, is against the contagiousness of cerebro-spinal meningitis, and it is important to examine this question carefully. M. Blondin says:—"The disease manifested itself at Geneva in January, 1805, in a family composed of a woman and three children; two of the latter were attacked and died in less than twenty-four hours. Fifteen days afterwards it showed itself in a neighbouring family, when four out of five children died after an illness of fourteen or fifteen hours each. A young man residing in the same house also died." The disease disappeared in the month of May, having caused thirty-three deaths. Vieusseux, in a memoir on this epidemic, says: "We do not doubt that this was a malignant contagious fever, against which one should take the greatest precautions."

In 1846 and 1847 the disease showed itself in the garrison at Lyons, and was confined to Fort Lamotte. Other regiments, much less favored in point of accommodation, and the civil population escaped. M. Chapuy cites an instance which excited suspicion of the communicability of the disease. He says that "a soldier of the 61st carried to the hospital one of his comrades who was attacked with the disease; the man was in perfect health, and talked and laughed with his companions only a short time before he returned to the barracks, when he was attacked, almost immediately lost consciousness, and rapidly succumbed with all the symptoms of the prevailing disease."

"The epidemic prevailed at Metz in 1847, 1848, and 1849. The 2d artillery regiment, which came from Bourges, where the disease existed, lost a man on the route, and was the first attacked after its arrival at Metz. It showed itself soon in another regiment occupying the same barracks, and afterwards in neighbouring barracks. In the hospital, three nurses and one of the chief surgeons fell victims to the disease. Those confined in the prisons—nearly four hundred—escaped. The civil population furnished only a very few cases, but these few occurred in the vicinity of the infected barracks." M. Boudin furnishes many other instances illustrative of the importation of epidemic cerebro-spinal meningitis from one point to another, but we have quoted enough to establish this fact, as well as the frequent isolation of the disease in infected barracks or hospitals. Both these facts furnish strong evidence in favor of the contagious nature of the disease. Importation is presumptive proof of the transmissibility of a disease, either by fomites or personal communication; and the comparative isolation of a malady must create more than a reasonable suspicion of a localized infection. Facts attesting the contagiousness of cerebro-spinal meningitis, similar to those quoted from the French records of this disease, are unfortunately not to be found in the history of the disease in this country! Dr. Henry Fish remarks, however, in his account of the epidemic at Hartford, that "whenever the disease appeared there, it was always in the same or near that part of the city where it did at first, and thence spread in different directions. There are many houses where it has appeared twice, and in some three times, with an interval of a year or six months between its visits; and while these families have been thus successively its subjects, neighbouring ones have been wholly exempt, although there is nothing peculiar in the situation, habits of life, or diet, which can be supposed sufficient to produce the difference." It is said that the people in the locality where the epidemic first appeared in Carbondale ascribe the disease to the diffusion, in the neighborhood, of the clothes of deceased soldiers, which were brought there by a pedlar. The disease made its appearance very soon after the introduction of these garments. In another locality in Carbondale where the disease prevailed with the greatest severity, the sufferers attributed the infection to the presence of the soldiers, and they burned the barns and buildings which they occupied as barracks. Although these popular convictions have

no scientific value in themselves, they derive some importance from the well established coincidence of this disease with the evils attendant upon camp life, and for this reason deserve investigation.

A consideration of the symptoms of cerebro-spinal meningitis suggests several points of analogy to typhus. With the exception of certain prominent symptoms which are ascribable to the acuteness of the local lesions, the general symptomatology is very similar to that of typhus. The rigors and cephalalgia with which the disease attacks, the feeble pulse and occasional irregular and jerking respiration, the evidences of great prostration, the anæsthetic or hyperæsthetic cutaneous sensibility, the manifold variety of the delirium, the occasional convulsions, muscular paralyses, and impairment of the special senses, and especially the eruption, which presents all the varieties observed in typhus—all these present a combination that is and has ever been suggestive of the analogy which this disease presents to ordinary typhus. The spinal symptoms form the striking distinction between the two diseases to those who are familiar with typhus, as it is known in this country and Great Britain. But some authors on typhus describe tetanic symptoms as occasionally present in this disease. Thus Joseph Frank affirms "that in a great number of the sick there is trismus, dysphagia, and rigidity of the cervical muscles." "I have remarked in typhus," says Hildenbrand, "spasmodic contractions of the muscles of the jaws and of the neck, rigidity of the fingers and limbs, and actual trismus." Both maladies exhibit a very great variety in their symptoms, for the reason that in both there is a considerable variety in the local complications.

It may be objected to the opinion that cerebro-spinal meningitis is a form of typhus, that the cerebro-spinal meningitis is too sudden in its attack, and too rapid in progress to be allied to typhus; but in answer to this it may be stated that the typhus siderans or blasting typhus, which devastated the garrisons of Saragossa, Torgau, Wilna, and Mayence, during the wars of the first Napoleon, terminated sometimes after a few hours. Similar observations were made in Ireland during the epidemic of 1847 and 1848, and among the French troops in the Crimea in 1856.

We come finally to the examination of the analogies which the lesions of cerebro-spinal meningitis present to those of typhus. Here where we ought to find, if anywhere, substantial proof of the identity of these two diseases, we are apparently confronted with the strongest evidence of broad and irreconcilable distinctions. According to Mr. Murchison, the post-mortem appearances of typhus may be summed up as follows:—"1. There is no lesion constant in, or peculiar to, typhus. The chief morbid appearances are a fluid condition of the blood, hyperæmia of the cerebral membranes, and increased intercranial fluid, bronchial catarrh and pulmonary hypostasis, softening of the heart, liver, spleen, and pancreas, hyperæmia and hypertrophy of the kidneys. The relative frequency of these lesions varies at different times and places—none are of constant occurrence or peculiar to typhus.

"2d. The intestines never exhibit the peculiar lesions constantly present in enteric fever, and the mesenteric glands are not enlarged.

"3d. No evidence of recent inflammation is ever found in the brain or its membranes, to account for the cerebral symptoms."

These statements are confirmed by most systematic writers on typhus. They all admit that there is no lesion peculiar to typhus, and nearly all affirm that there is never any inflammatory lesion in the brain.

If we sum up the post-mortem appearances in cerebro-spinal meningitis, we find that, though the lesions are by no means constant, they are markedly characteristic. In the brain the morbid appearances vary from those of more or less intense congestion, with sub-arachnoid and ventricular serosity, to those which belong to the highest degree of inflammatory action, exudation of lymph and pus. In the thoracic cavity we may find a complete absence of mor-

bid appearances, or the same variations from congestion to acute inflammation found in the brain, *i. e.* pulmonary congestion, pleurisy, and pericarditis, with exudations of serum and pus. In the abdominal cavity, the same observations are repeated. In many instances the organs are described as healthy, in others the evidences of congestion and fatty degeneration of the liver and kidney are distinctly present. Abscesses in the regions of lymphatic glands, in the tunica vaginalis testis, and swellings of the joints, have all been noticed. If we contrast these *resumés* of the morbid appearances in the two diseases, cerebro-spinal meningitis and typhus, we find at first sight very few points of analogy. But let us examine more closely: in the first place, the variety of the lesional changes in both diseases suggests one common characteristic, *i. e.* a general dyscrasia—a change in the constitution of the blood, which determines a variety of local disturbances, such as congestion, inflammatory processes, and degenerative changes in the different organs and tissues of the body. In the second place, if we except the evidences of inflammation in the cerebro-spinal meninges, we find in other respects that the lesions in the two diseases are similar. The complications and sequelæ in typhus fever are identical with those which occur in cerebro-spinal meningitis, and which in both depend upon the same pathological processes.

But what shall be said of the distinctive feature of cerebro-spinal meningitis, the presence of inflammatory exudations in the brain? Although, as has been observed, most writers on typhus deny the existence of inflammatory lesions in the brain in typhus, authorities are not wanting who affirm that such lesions do occasionally exist. Sir John Pringle observed purulent exudations in the brain in three cases of jail fever, and Hildenbrand of Vienna describes inflammation of the meninges, with purulent exudation, as one of the occasional lesions of typhus. Haller makes a similar observation.

We have thus reviewed, under the threefold aspect of causes, symptoms, and lesions, the analogies which cerebro-spinal meningitis presents to typhus. We are aware that in attempting to establish the alliance of these two diseases we are extending the boundaries of typhus beyond the limits within which most systematic writers confine it; but in doing this we are not exceeding the latitude which many high authorities give to this disease. According to Gase, "Typhus appears sometimes under the form of an essential fever, of pleurisy, of pleuro-pneumonia, of dysentery." Hildenbrand states "that many grave diseases described by authors under different denominations, are forms of contagious typhus;" and Breslau says, "that if attention had been paid to the fact that this proteiform disease presents as many varieties as there are combinations in the lesions of different parts of the organism, we should not have so many symptoms described as pathognomonic." In conclusion, we would observe that the analogy which is claimed for cerebro-spinal meningitis to typhus is not more strained than that which has been supposed to exist between typhus and the oriental plague. Mr. Murchison, the latest and perhaps the highest living authority on continued fevers, says that "there exists a strong analogy, if not identity, between typhus fever and true plague, the poisons being generated from similar causes, and differing only in intensity from the effects of climate and other collateral circumstances. Plague is probably the typhus of warm climates." The same remarks might with equal justice, we think, be made in a comparison of typhus with cerebro-spinal meningitis. The causes from which the latter disease originates have been shown to be similar to those of typhus; the symptoms are many of them identical, and all of them referable to the same essential dyscrasia, and the lesions, though they present some striking peculiarities, have all been described as belonging to typhus.

REPORT OF SIXTY CASES IN PROF. NOEGGERATH'S CLINIC FOR DISEASES OF FEMALES,

AT THE NEW YORK MEDICAL COLLEGE,

REPORTED BY C. C. TERRY, M.D.

THE ordinary uterine sound or pessary, constructed of copper coated with silver or hard rubber, is capable of two actions, viz. dilatation of the cervical and uterine cavities by means of its frequent introduction and increasing size; and simple irritation, acting in this relation like any other foreign body. In the accomplishment of the first-mentioned action much may be done by way of relieving the dysmenorrhoea depending upon contraction of the uterine outlet; while by means of the irritation alone we may often provoke a discharge of blood which initiates the menstrual flow. It seems that in some cases every preparation for the menstrual crisis is duly fulfilled, excepting that the *discharge* does not take place; at such times a slight *determining* interference may establish the discharge and avert serious consequences. But in many cases the hæmorrhage is merely traumatic, a result of the injury done to the delicate and congested mucous lining of the uterus, and is but a temporary relief, or, indeed, may become so excessive as to call for the interference of medicine.

What is here said of the effects of the ordinary sound may be applied with some modifications to the use of local emmenagogues applied to the uterus, such as nitrate of silver to the cervical or uterine mucous lining, and dry cupping the uterine cavity. The former is apt to act as an escharotic by destroying the delicate epithelial surface, or causing ulcerations of the mucous lining of the uterus with the resulting cicatrices.

The ingenious method of dry cupping described by Prof. Simpson in his "Clinical Lectures" approaches more nearly the design of nature, and, as he says, "is not likely to be attended with so much general deterioration of the system." But after all these means fail, after internal medical and external mechanical means have been tried in vain, there remains another resource—electricity.

1. The phenomenon of menstruation depends upon a consent of two essential organs, the ovary and the uterus; if either fails of its part, the other can effect only some disturbance of the system.

2. Menstruation is the result of a process of *erection*, the uterus being an erectile organ, and electricity is a powerful excitant to this action.

Text-books on diseases of females and public hospitals furnish abundant examples of disparity of development between the ovary and uterus, and the consequent disorders of menstruation. Pathologic investigation has shown that in the majority of cases the small uterus is accompanied by a small or atrophied ovary, yet the ovary may still be of normal size and perform *its* function indifferently well, while the uterus, by failing of its part, renders the act insufficient, and the general health suffers in consequence. As the ovary is the organ of ovulation, the initial and centre of the sexual organism, there we should expect to find what physiology demonstrates—that the ovary is the principal actor in the occurrence of menstruation. The subject of ovulation belongs to the province of physiology, but the process of menstruation is liable to so many and such important irregularities as to bring it into intimate relation with pathology; and in order to clearly comprehend the function, it is necessary to notice some peculiarities of the organ.

An erectile organ contemplates three necessary constituents, viz. arteries with a spiral course, venous reservoirs, and muscular trabeculae. The erectile portion of the ovary, called the "bulb of the ovary," or "corpus spongiosum ovarii," is an erectile vascular body immediately below the ovary and reaching towards the uterus. It is elongated and flattened, a little longer than the long diameter of the

ovary, about a third of an inch in thickness, and rather more in width or height. It is inclosed in a tough fibrous envelope, and its use seems to be to push the ovary outward and upward in such a manner as to bring the escaping ovum within the grasp of the Fallopian extremity. If the bulb of the ovary be injected, such is the movement of the ovary while the tube remains unchanged.

It is easy to demonstrate in the uterus the presence of the erectile characteristics. The utero-ovarian artery is distributed very unevenly. Near the neck of the womb its branches are few and straight, while near the fundus are numerous, tortuous, and closely-packed ramifications of the artery, covering the lateral angles of the fundus. Towards the ovary is another mass of large tortuous branches. Such an extreme vascularity is far beyond the needs of mere nutrition, and as such excess is *ovarian* as well as uterine, it seems calculated for more than either nutrition or gestation.

The venous system of the uterus is so developed that in some specimens the organs seem like a network of bloodvessels. If the vascular system of the uterus and ovarian bulb is separated from the muscular fibres intervening by means of some solvent, the erectile system of the uterus represents the form and outline of the fundus and body of the uterus as far as the os internum, and seems formed of twisted and almost spiral venous canals, like those of the corpus spongiosum penis. Near the angles of the uterus the arteries form most of the vascular mass.

If a fresh pelvis with its contents be immersed in warm water and the ovarian veins injected, the ovary is slightly elevated while the uterus performs a movement similar to that of the penis in erection, becoming more convex in front and behind, the borders round and smooth, and the cavity enlarged. The ordinary sound by mere irritation may excite the uterus to a degree of this action; but under the influence of electricity it is vastly increased. In 1850 Prof. Noeggerath modified the ordinary sound by constructing it of two lateral halves, one of copper, the other of zinc. The effect of the galvanic action thus induced between the copper and zinc was very pleasing, in some cases effecting a cure where all other means had failed.

The intra-uterine pessary of Prof. Simpson, as described in his lectures, consists of a flattened spheroidal bulb, perforated for the point of the "staff" used in introducing the instrument, on a stem $2\frac{1}{2}$ inches in length, made of two pieces—the lower copper and continuous with the bulb, the upper zinc and joined by the lower end to the copper half. After being introduced, this instrument will usually remain in the uterus, the thin crust forming on the surface of the zinc, half making it sufficiently rough to retain the hold of the tissues. This instrument, from its usually feeble action, will sometimes have a tardy effect very much like a sound frequently introduced, besides the inconvenience of wearing it so long a time as is sometimes necessary. Prof. Noeggerath has lately modified this instrument in the same manner as the sound, by constructing it of two lateral halves of copper and zinc. The action is thus greatly increased. In one case of obstinate amenorrhoea, in a girl of eighteen years, it developed all the symptoms of menstruation in a few hours, and was withdrawn to prevent any ill-consequence such speedy general disturbance might cause. The discharge appeared without pain and continued normally.

Local treatment of uterine disorders has been held too much at arms' length; but we must guard against the opposite extreme, and in nowise unnecessarily break in upon harmless prejudice. Among emmenagogues the galvanic pessary is the most effectual and speedy; at all events it is safer than temporizing with all sorts of drugs, many of them uncertain in their action and often injurious.

JONATHAN KNIGHT, M.D., late Professor of Surgery in the Medical Department of Yale College, died at New Haven, Conn., August 25th, in the seventy-fifth year of his age.

THE TREATMENT OF ANEURISM,

INVOLVING THE SUBCLAVIAN IN SUCH A PART OF ITS COURSE,
THAT A PROXIMAL LIGATURE IS ONLY APPLICABLE
WITHIN THE SCALENI.

By T. T. SABINE, M.D.,
OF NEW YORK.

(Concluded from Page 91.)

XIV. LIGATURE OF SUBCLAVIAN, CAROTID, AND VERTEBRAL.—After the fatal termination of Dr. Rodgers's case at the New York Hospital, in 1845, it was determined by the surgeons of that Institution, that if a similar case should ever present itself, the operation to be adopted was the above. It was at that time thought—1st. That the chief obstacle to success was the circulation through the vertebral; 2d. That that being removed, the circulation through the other branches of the subclavian would not be sufficient to prevent the formation of a clot. The first required no proof; the second did. This proof has been afforded in the case next to be cited, and showed that the reasoning was fallacious, a circumstance which could not have been foreseen.

PARKER, . . . 42d day, hæmorrhage.

The condition of the arteries was as follows: *Proximal clot*.—The innominate was firmly plugged. The proximal stumps of the vertebral, with its clot, if any existed, had ulcerated away. *Distal clot*.—Both the carotid and vertebral were plugged on the distal side of their respective ligatures. The subclavian was open. In other words, a clot was found everywhere, except on the distal side of the subclavian and the proximal side of the vertebral ligature. It is impossible to say whether one existed in the vertebral and had ulcerated away with the stump, or not. No good reason can be seen why one should not form. The artery is comparatively small, and the ligature was, or in future cases might be, applied at a sufficient distance from the origin. Moreover, the position of the artery, and the comparatively small amount of blood circulating in the subclavian, all favor it. Future cases must, however, be the criterion by which to decide. In this case particular care was taken to place the subclavian ligature as near as possible to the origin of the vessel, in order to afford all possible space; at the same time the circulation through the vertebral was cut off, which had previously been the most efficient cause in preventing the formation of a clot. This operation, then, while it made an advance by the introduction of ligature of the vertebral, did not fulfil the desired indication—the formation of a distal subclavian clot. If it is proper to judge from the result of a single case, this operation is never likely to prove successful.

XV. PROPOSED OPERATIONS.—It has been seen that the four operations just described should be abandoned on account of their almost necessarily fatal character. It becomes necessary, then, either so to modify them that they will be likely to prove successful, or else to resort to some other means than proximal ligature. Before proposing a new operation, or a modification of a previous unsuccessful one, it becomes necessary to consider carefully the indications to be answered. In the treatment of subclavian aneurism by proximal ligature there are four—1st. A practicable and tolerably safe operation; 2d. The formation of proximal clots; 3d. The formation of distal clots; 4th. The cure of the aneurism. The first, second, and part of the third are answered by the two operations last discussed. Part of the third, the distal subclavian clot, and consequently the fourth, are not. The indication to be met is, then, the formation of the distal subclavian clot. For this purpose two operations are proposed—1st. Ligature of the subclavian, carotid, vertebral, mammary, and the branches of the thyroid axis; 2d. Ligature of the same arteries, except substituting the innominate for the subclavian.

XVI. LIGATURE OF SUBCLAVIAN, CAROTID, VERTEBRAL, ETC.—We must now consider how far this operation will answer the above indications.

1st. As to the practicability and safety of the operation. The *subclavian* and *carotid* deviate but little from their usual course and position, and have been ligated at or just beyond their origins a sufficient number of times to show the ease with which it may be done. In 297 cases examined, the *vertebral* arose within the scapular every time, and in only seven nearer than usual to the origin of the subclavian. The artery has been ligated but once on the living subject (Parker), but this once showed that it was a comparatively easy, though a delicate, operation. In 290 out of 297 cases examined, the *mammary* held a normal position, internal to the scapular; it could easily be ligated. The *thyroid axis* and its branches next claim attention. First, as to the position of the axis itself: in 271 out of 296 cases it was found to arise in its usual position, internal to the scapular. Second, as to the number and constancy of its branches. The number in the majority of cases is three, viz. inf. thyroid, supra-scapular, transversalis colli. *Inf. Thyroid*.—In 267 out of 296 cases it arose from the thyroid axis. *Supra-Scapular*.—In 169 out of 186 cases it arose from the thyroid axis. *Transversalis Colli*.—In 120 out of 148 cases it arose from the thyroid axis. The ease, therefore, with which the thyroid axis or its branches could be ligated needs no discussion. The *sup. intercostal* arose in its normal position *beneath* the scapular in 134 out of 158 cases. This artery could not, I think, with any dissection that it would be safe to make, be ligated. This is of little importance, as the amount of blood running through it is small, and would rather favor the formation of firm, fibrinous laminae in the aneurism, as we have seen happens in the treatment of popliteal aneurism by compression. As it arises *beneath* the scapular in the great majority of cases, it would not materially interfere with the formation of a proximal subclavian clot.

The danger from the operation itself would be slight.

It is then both a practicable and a safe operation.

As to whether the second and third indications, the formation of proximal and distal clots, will be answered by this operation, can best be seen by supposing a case in which the operation has been performed. Let such a case be taken, then, in which the arrangement of the arteries is normal, and ligatures be applied in the several positions indicated. From the experience derived from former operations, it may very safely be concluded that clots will form on the proximal side of the subclavian and carotid ligatures, that is to say, in the innominate, and on the distal sides of the carotid and vertebral ligatures. In Parker's case the proximal stump of the vertebral had ulcerated away, and therefore it is impossible to say whether a clot had formed or not. It probably had, and that for reasons given on a previous page. There is no reason whatever why clots should not also form on both sides of the mammary, inf. thyroid, supra-scapular, and trans. colli ligatures. The arteries are comparatively small, no branches are given off near the point ligated, and hence there is nothing to prevent such a result. I have thought it was better to substitute ligation of the three branches of the thyroid axis for that of the axis itself. If the ligature be applied to the axis itself, there will not only be very little room for a proximal clot to form, on account of the shortness of the vessel, but the formation of a distal clot might be prevented by the current which would pass from the inf. thyroid into the supra-scapular and trans. colli, as that would be one of the principal means for the establishment of the collateral circulation.

Thus far everything promises success, and now the formation of the distal subclavian clot alone remains to be considered. The amount of space afforded by these additional ligatures is much greater than has ever been obtained by any previous operation. It includes all that which exists between the ligature and the sup. intercostal, which, as has been shown, arises within the scapular in only 24 out of 158 cases—1 in 6½. This amounts to 1¼–1½ inch. Can a clot form in this space? By referring to the statistics of the length of the innominate, it will be seen that in more

than half the cases it was less than one and a half inches, and yet after its ligation a proximal clot formed in three out of four cases. If, then, a clot will form in an artery so large and so unfavorably situated for such a result, we ought surely to expect it in an artery so much smaller as is the subclavian. Suppose now the branches of the subclavian are not normal, what will be the effect? They will arise within, beneath, or beyond the scalenus. If they arise within, they can easily be secured. If they arise beneath or beyond, they will have no effect in preventing the formation of a proximal subclavian clot.

The fourth indication now requires attention. If the operation is successful, will the disease for which it was undertaken be cured? The cause of the disease, or rather that which tends to keep it up, is removed, and therefore we should expect as much in this case as we do by a similar treatment for the same disease elsewhere.

XVII. LIGATURE OF INNOMINATE, CAROTID, VERTEBRAL, ETC.—This operation is the same as the last, excepting that a ligature is applied to the innominate instead of the subclavian. The objections to this are two. 1st. The difficulty of applying such a ligature; 2d. The chance of a proximal clot not forming. The difficulty cannot be very great, as the artery has been tied thirteen times, and in four other cases the artery has been exposed, but the operation abandoned for other causes. It could easily have been tied in Parker's ease. The chance of a proximal clot not forming is a more cogent reason. I do not, however, think that need be feared, and for reasons already given under previous heads. The advantages are:

1st. A clot is almost certain to form in the subclavian, between its origin and the first pervious branch (sup. intercostal), extending thence into the innominate and carotid.

2d. If for any reason the vertebral could not be ligated, or it should hereafter prove that its ligation is unsuccessful, there would still be room for a distal clot.

3d. If the subclavian were found diseased more internally than was supposed, a more healthy artery, or rather a different artery, would be ligated.

4th. The innominate is not in such close relation with important structures as is the subclavian where the ligature is applied, *e. g.* the pneumogastric, sympathetic, pleura, etc. The above operation is one of my own proposal; at least I have not heard it mentioned by any one.

RESECTION OF ONE INCH OF AN IMPERFECTLY UNITED TENDO-ACHILLIS, AND SUCCESSFUL TREATMENT BY SUTURES.

By WARREN WEBSTER, M.D., ASST.-SURGEON U.S.A.
IN CHARGE OF DE CAMP GENERAL HOSPITAL, DAVID'S ISLAND, N. Y. HARBOR.

WE are told that when a tendon is divided in an open wound, reunion of the two ends rarely takes place, in consequence of the violence of the resulting inflammation preventing adhesive action. Whether the failures of most of the earlier operations of tenotomy depended upon this cause, or were mainly due to the neglect of the surgeon to maintain the divided extremities in apposition during the treatment, the following report of a case may assist to determine. It will be seen that free exposure of the divided ends of the tendon to suppuration, was not in the present instance incompatible with a successful cure. The employment of sutures, to assist the relaxed muscles in maintaining the divided extremities of the tendon in contact during the cure, is also a feature of interest in the case.

Paul, a half-breed, applied to me, while post-surgeon at Fort Larned, Kansas, in November, 1860, for the treatment of an injury which he had received about three months previously while engaged in running a foot-race. His statement was that he felt something, at the time of the injury, suddenly give way in his right leg, with an audi-

ble snap, the part being instantly deprived of its functions. He said that a well marked interval or hollow was perceptible above the heel, and in attempting to step upon the foot after the injury, he immediately fell to the ground. No attempts were made to bring the divided ends into proximity with each other, by relaxation of the affected structures, and but little attention had been paid to the subsequent quietude of the limb. At the time of my examination there was an intervening gap between the divided ends, of about an inch in length, where but little plastic matter seemed to have been poured out to fill up the space. The uniting bond was so elongated and weak as to render the limb powerless in progression. I resolved to expose the parts by a free incision, remove the slight connecting medium, pare the retracted extremities, and endeavor to unite them by the introduction of sutures of silk. The operation of bringing the severed ends in contact after the removal of the intervening substance was attended with considerable difficulty. This, however, was accomplished by placing the limb in a thoroughly relaxed position, and inserting two strong ligatures through the ends of the tendon about three lines from the extremities. The parts were thus approximated, and the relaxed position of the limb was maintained by an apparatus consisting of a ring of leather placed around the thigh, above the knee, from which a cord was attached to a loop in the back of a slipper. The gastrocnemii muscles were also surrounded by a firm bandage. This apparatus was used for six weeks, when the patient was allowed to walk about, wearing a high-heeled shoe, for three weeks longer.

After having tied the ligatures one end of each was cut off, and the others withdrawn, as practised in the ligation of vessels. The incision was then united its entire length (which was about three inches) in the most exact manner possible. The ligatures were removed on the twenty-fifth day, and during the greater part of that time the wound discharged purulent matter. The fourteenth week after the operation the patient walked with scarcely any lameness, and the tendo-achillis appeared to be perfectly united.

American Medical Times.

SATURDAY, SEPTEMBER 3, 1864.

COMMISSIONERS OF LUNACY.

THOSE members of our profession who are interested in lunacy legislation must have been not a little surprised at the resolutions adopted at the last annual meeting of the Superintendents of American Institutions for the Insane. Although decisions on such important questions, taken by *savants on the wing*, are not of as much consequence as resolutions calmly and deliberately formed in the retirement of the study, still we regard them as too sophistical and dangerous to be allowed to pass unnoticed. Any movement which tends to weaken the guarantees against errors in the case of any person suspected of insanity, should be promptly met and defeated. Personal liberty is of priceless value and dearer than the so-called *sacredness of family grief* which might, by some possible mistake, commit to an asylum without authenticated proofs of insanity. The tendency of these resolutions will be to embarrass the progress of science, and retard proper legislation in regard to the legal rules and forms applicable to those about to be deprived of liberty and fortune on the allegation of insanity, and the regulations by which the same unhappy person may still be heard on his own behalf, whilst under the

hardship of a necessary confinement. Our State Legislatures, which have had before them projects of laws concerning Commissioners of Lunacy, may suppose that an association of specialists has long and maturely deliberated on this subject, and finally have come to this adverse conclusion. But no real discussion preceded the voting. Reading the informal conversation which took place, we are struck with the fact that there was no one present who, from his personal relations, could take the opposite view. No member doubted the individual capacity and devotion to duties, or the moral qualities and the scientific attainments of the Superintendents or other officers of our asylums. The members of that meeting seem to have forgotten that, on account of their special position, they had no right to vote resolutions which in effect deny us the guarantees conferred by the actual state of the sciences. The Association declared Commissioners of Lunacy to be *unnecessary, injurious, and subversive*; and in effect, that no control should reach State or Corporate institutions, deeming such supervision necessary only in private enterprises.

Commissioners of Lunacy are declared unnecessary. Now every intelligent person knows that our laws on insanity are very defective, and in some States are almost totally wanting. The best code of laws in this country to-day needs revision and alteration. They make no proper distinction between the insane, whether in magnificent private or public asylums or immersed in those infernal habitations called Poor-Houses. Nor do the laws admit the division of patients into curable and incurable. If this distinction were made, patients who have the chance of recovery within a certain time might be relieved of their present demoralizing associations, and placed where recovery would be possible. Can Commissioners of Lunacy, whose special duty would be to improve our laws as well as the condition of the insane, be called unnecessary? We venture to assert that the laws and regulations are so deficient that incurability may result from defects in our best institutions. These defects will never be remedied by Superintendents or Trustees. We can only look to an independent Commission of Lunacy.

But Commissioners of Lunacy are said to be injurious. To whom? Certainly not to the insane. Every consideration of justice and humanity teaches us that they would benefit this class. Would they be injurious to trustees or superintendents? Experience proves that they would not. Nor is it reasonable to suppose that they would. Commissioners of Lunacy will always be chosen from among the best officers who, in their capacity of Trustees or Superintendents, have given repeated proofs of their scientific attainments and moral integrity. How could a protecting law and its officers become injurious to what might be called their own constituency? An old book on the Spanish statute laws has the following explanation: "Laws are made in order that good people may be able to live among the bad and to prevent the latter from persevering in their evil doings." The theory proposed at the meeting of Superintendents was, that a law which reaches no existing evil is needless; and that a law which undertakes to regulate what may as well be left to the unrestricted action of men, is *worse than needless*. These two groundless propositions are certainly in opposition to the practical object of laws as understood centuries ago.

How can Commissions in Lunacy be subversive; and if so,

of what? In all civilized countries such Commissions are established to inquire into the moral and material management of public and private asylums. They report their observations on special books of the asylum itself, and transmit the same remarks to the executive power. Directly they take no action. If their suggestions are good and practicable, Trustees and Superintendents will certainly accept them, and thus good is done to the insane. How, then, can such Commissions be subversive? Certainly such allegation can have no just foundation. In but one way have these Commissions as yet proved subversive. Unrestricted power leads some men to become despotic without even being themselves aware of the fact. Commissioners of Lunacy have frequently corrected this evil of asylum management by what might be called "peaceful intervention."

In every aspect in which we view this subject, we are more and more strengthened in the conviction that all the States should without delay appoint Commissions of Lunacy. Thousands of poor insane people to-day are dragging out miserable existences in our Poor-Houses, whose piteous appeals for relief from their wretched abodes fall only upon the leaden and unsympathizing ears of attendants. But to them relief can never come except through the intervention of an intelligent Board of Visitors. In the majority of public asylums abuses of power and mismanagement exist, and the remedy does not lie with Trustees or Superintendents, but with a vigilant Commission, which from a higher stand-point comprehends the evil and is prompt to suggest the remedy. Nor do we believe that the best institutions would suffer from a periodical inquiry, by thoroughly qualified Visitors, into their management. On the contrary, we should anticipate from the comparisons instituted a generous emulation and efforts to attain a still higher standard of excellence. Nor do we share the apprehensions of the Superintendents that the appointment of Commissioners would be so perverted by political influences that an unworthy class of men would always be selected. The argument admits of a personal application, for it is by the same influences, we regret to admit, that the Superintendents obtained their situations. And yet no one would presume to deny that the members of the Association, in their remarks upon their abilities, entertained too high an opinion of their merits. There is as little danger in one case as in the other that their aim would be only to obtain a salary.

CASE OF SURGEON-GENERAL HAMMOND.

THE decision in the Court-Martial of SURGEON-GENERAL HAMMOND will be received with profound regret. Standing at the head of the medical department of the public service, he necessarily represented in his official character the medical profession. But DR. HAMMOND had been regarded as its representative in a higher sense, viz. as a man of science. His accession to position and power was hailed as a just recognition, on the part of Government, of real merit and ability. Nor has his official career disappointed his friends. He at once addressed himself to thorough reforms, and by all available means gave tone and efficiency to every branch of the army medical science. Our present admirable system of military hospitals was established, the service was sifted of its incompetents, a higher standard of qualification was set up, the Medical and Surgical History of the Rebel-

lion was projected, the Army Medical Museum inaugurated, etc., etc. In the meantime destructive battles were being fought, and great stores of material had to be collected and made available. On every great battle-field the SURGEON-GENERAL was found personally engaged in systematizing and giving efficiency to the operations of the department. The army medical service rapidly assumed an importance and a degree of perfection which was proudly recognised at home and generously acknowledged abroad. It was, however, long known by his friends that in his efforts at reform and improvement, DR. HAMMOND met with serious opposition from high officials, which finally took the form of absolute animosity. He was accused of extravagance, and at length of malfeasance, and a Commission was appointed to obtain the facts on which to base his condemnation. We have the final results in the verdict of the Court-Martial. DR. HAMMOND asks a suspension of judgment until he has an opportunity to prepare a review. From a careful perusal of his defence before the Court, his friends may, we think, anticipate a satisfactory explanation of much of the evidence.

THE

Union of Didactic and Clinical Instruction.

AN INTRODUCTORY ADDRESS DELIVERED AT THE
OPENING OF THE COURSE OF LECTURES IN
BELLEVUE HOSPITAL MEDICAL COLLEGE.

SESSION 1863-4.

By STEPHEN SMITH, M.D.,

PROFESSOR OF PRINCIPLES OF SURGERY.

GENTLEMEN—You assemble to-day from widely separated portions of the country, to commence a course of medical lectures, in obedience to an ancient and time-honored custom of our profession. From an early period of authentic history, medicine has been taught by appointed means. The art of teaching medicine, like many other arts, reached its highest development during the earliest period. Necessity compelled the first instructors to combine theory with practice, science with art, didactic with clinical instruction. Hospitals and schools were united, the one being the complement of the other. The carefully compiled records of observation and experience formed the textbooks of the student; and the immediate application of the principles and precepts learned at the bed-side of the sick, and under the direction of the master, completed the curriculum of daily study. This is the rational system of teaching—at once the most thorough and efficient—and should never have been departed from. We cannot better improve this present hour than by tracing its origin, progress, and complete development, and by applying the practical lessons which this review will inculcate.

Among people of high antiquity, the first effort to systematize the treatment of the sick consisted in exposing them in public places, in order that any passers-by, who had been similarly afflicted and cured, might give their advice for the benefit of the sufferers. At a later period, those who had been cured of diseases were required to go and deposit in the temples a votive tablet, which was a detailed account of the symptoms of their diseases, and the remedial agents which had been beneficial to them. It very soon became popular to visit by preference some temples of great and wide-spread fame, and these, therefore, were in time made the principal depositories of the registers of the sick. These records were kept with the same care as the archives of the nation. At first they were open to the inspection and consultation of the public. Every one had the privilege of going to consult them personally, and of choosing for

his sickness, or that of his friend, the remedies which long experience had here recorded. Every man thus became his own doctor—a system which has in our day been revived by the Homœopaths, who place in the hands of their patients a record of symptoms, each offset by its appropriate remedy.

But it was soon found to be inconvenient and dangerous to allow the common people to prescribe for their own diseases. Symptoms were misinterpreted, and remedies were misapplied. The records were therefore withdrawn from public scrutiny, and placed in the exclusive charge of the priests who ministered in the several temples. The sick now related their symptoms to the official organ, who in his turn consulted the tablets or records, and prescribed the proper remedies, and received in behalf of the presiding deity the votive offering. The priests having thus the exclusive control of all the recorded facts and observations in medicine, and having monopolized the practice of the Art, endeavored to reduce their knowledge to a system. The records were carefully revised and collated, and finally formed into a Medical Code, which they called the Sacred Book. This Book was the undeviating guide to medical practice for centuries. Whoever departed from its precepts and injunctions, did so at the peril of his life. We here trace the beginning of the legal responsibilities of medical men. Under this Medical Code occurred the first prosecutions for malpractice, and the physician found guilty of departing from its precepts was condemned to death.

We cannot be surprised that the ancients attached so much importance to this volume. It embodied the whole science of medicine; it contained the aggregate experience of centuries. It was the most precious legacy which the past had bequeathed to the present. It was a faithful transcript of the ever-varying phenomena of disease, and the only guide to the use of remedies. To doubt its sacred aphorisms was to cavil at the laws of nature. It was a medical book without a theory. It contained only facts. And so it was received as the great statute-book of ancient medicine.

The temples where the sick congregated were the hospitals of that period, and the votive tablets were the carefully drawn records of disease. These temples became in time the great centres of medical knowledge and education. Thither students flocked from distant states and foreign countries, to drink at the original fountains of experience. Men of genius and cultivation here attained to a profound knowledge of the recorded wisdom of the past, and skilled in the practical application of that knowledge to the relief or mitigation of human infirmities. As their fame spread they attracted pupils, and attaching themselves to the temples, in turn became practical teachers of the Art of Healing. Thus arose schools of medicine in near and remote countries, many of which attained to great eminence, and had a lasting influence upon the future history of medicine.

Great as was the veneration for the Sacred Book, and binding as were its precepts upon teachers and pupils, it could not entirely restrain within the bounds of rational inquiry the free play of the human mind. A class of teachers in time appeared, who discarded observation and experience, and appealed to reason and the suggestions of the imagination. The plain, practical, and unyielding axioms of the Medical Code, confirmed by long practice and supported by the authority of the greatest masters of the art, were but so many clogs and hindrances to speculation. The immutable facts of science were employed as the scaffolding to the theories which they ingeniously constructed, and when they had served that purpose were rejected as worthless material. They no longer sought to add their quota to the records of their predecessors. They forsook the temples, and betook themselves to retired and undisturbed retreats. They became pure theorists.

In the little Republic of Greece, at a period somewhat later, ancient civilization shone forth with unwonted splendor. Philosophy and the fine arts were cultivated with

passionate fondness, and in their turn they quickened the intellect to an extraordinary degree. The imagination supplanted reason, and speculation was preferred to deduction. Theories were built up on foundations which crumbled to pieces even while the architect was moulding the superstructure to his taste. Not only did the philosophers of that age devise systems on subjects beyond the range of observation, but they frequently rejected the teachings of experience, and all positive knowledge, and abandoned themselves to idle dreaming. Forsaking the paths of logical induction and deduction, they began to reconstruct the infant sciences on the shallow basis of hypothesis. Medicine, still wrapped in mystery, appeared a most fruitful field for cultivation, to these transcendental philosophers. Nor were they long in entering it, or scrupulous in the use of means to revolutionize both its theory and its practice.

Two schools of medicine now arose in Greece, with sharply defined peculiarities. Each had its special method of studying and teaching, and both have impressed their customs upon all succeeding generations. The first adopted the Sacred Book as the safe and unerring guide to truth. It still located itself within the sacred precincts of the temples where the sick congregated, thus basing its system of teaching upon observation and experience. It accepted no asserted fact or principle as true, or worthy even of consideration, unless it had been subjected to rigid experimentation. Every disease was investigated in the light of the Sacred Record—the science of that time—and every remedy was applied with the exactest detail. The student was forbidden seclusion. He was constantly brought face to face with disease in all its forms, and compelled to make a practical application of his knowledge. Reason was allowed its full scope in the construction of theories and systems, but its premises must be fixed and indisputable facts. Every pupil was required to follow rigid, logical induction and deduction, when he departed from the axioms of the past. This was pre-eminently a practical school; it was also a clinical school; it was the basis of legitimate, orthodox medicine; and from it sprang the rational system of studying and teaching.

Opposed to this rigid method of teaching were the theorists. They withdrew from the temples, to them defiled by the presence of the sick, and betook themselves to quiet groves and secluded retreats, where nothing would divert their thoughts, or obstruct the full play of the imagination. Here their classes assembled and listened to fine-spun theories on the essences, on the prognostic value of particular numbers, on the indications of dreams, on the influence of the moon upon the sick or on the therapeutic uses of plants according to their color. Doubtless they felt the pressure of the popularity of the clinical school, and on certain days compelled a few sick vagrants to visit their classes, when the professor explained to his distant and wondering pupils how precisely the disease had conformed to his theory. With his own finger he touched the pulse and informed the pupils how it felt; with his own hands he applied each dressing and manipulated the affected part. The pupil was left to doubt and conjecture, or in after times to repeat his lesson as an experiment upon his patients. All was theory—nothing was practical.

The Practical or Clinical School of the greatest renown was located on the Island of Cos, and was in the temple of Esculapius. Its head was the Father of Rational Medicine—Divine Hippocrates. At this brilliant period in the history of Greece—the age of Pericles, of Socrates, of Plato—Hippocrates was one of the most eminent philosophers. He was one of the best observers and one of the most profound thinkers of that or indeed of any other age. His works are the very perfection of philosophical writing. They are remarkable for accuracy of observation, precision of detail, and severity of logic. He seems to have rigidly scrutinized every recorded fact or principle, and practically applied every precept of his predecessors. Trained to the closest habits of study and investigation in the clinical school, he was prepared to advance beyond the limits of

existing knowledge, and add largely to the sum of positive facts and practical principles in our art. He reconstructed the groundwork of rational medicine, extended and perfected its foundations, and added not a little to the beautiful superstructure which it is our privilege to witness so near its completion. Hippocrates is justly regarded as the Father of Medicine. He is no less truly the Father of clinical teaching. The greatness and influence of the School of Cos grew out of its eminently practical character. It arose to great and deserved eminence, not more through the widespread fame of its founder, than the rigid system of teaching which it practised. Students annually gathered at the temple of Esculapius from every portion of Greece, and from countries beyond the seas.

An elegant writer has pictured to us the opening of a course of lectures at this famous school. He remarks:—"Near a column of the temple, and holding a roll of papyrus in his left hand, stands Hippocrates. Gathered about him in picturesque little groups there is a company of Greek youths. Their tasteful and elegant costumes, their earnest and intelligent faces, and their general air and bearing, all show plainly enough the superior refinement and culture of the class to which they belong. They are medical students, who have assembled here from the several states of Greece, to acquire the clinical skill and experience of the great surgeon and physician of Cos, and to listen to the eloquent lessons of the illustrious professor."

If we turn to the works of Hippocrates, it will not be difficult to determine what were the heads of this introductory discourse. We hear him saying, in language full of significance—"Medicine is of all the arts the most noble, but owing to the ignorance of those who practise it, it is at present far behind all the other arts. There is, unfortunately," he adds, "no punishment visited upon the ignorant physician, except disgrace, and that does not hurt those who are familiar with it. Such persons are like the figures which are introduced in tragedies, for as they have the shape, and dress, and personal appearance of actors, but are not actors, so also physicians are many in title but very few in reality." Turning to those who were commencing the study, he says: "Whoever is to acquire a competent knowledge of medicine, ought to be possessed of the following advantages: a natural disposition; instruction; a favorable position for the study; early tuition; love of labor; leisure. First of all, a natural talent is required; for, when nature opposes, everything else is vain; but when nature leads the way instruction is easy, and the student readily appropriates the principles to himself. He must also bring to the task a love of labor and perseverance, so that the instruction taking root, may bring forth proper and abundant fruits. Instruction in medicine is like the culture of the productions of the earth. For our natural disposition is, as it were, the soil; the tenets are, as it were, the seed; instruction in youth is like the planting of the seed in the ground at the proper season; the place where the instruction is communicated is like the food imparted to vegetables by the atmosphere; diligent study is like the cultivation of the fields. Having brought all these requisites to the study of medicine, and having acquired a true knowledge of it, you will be esteemed physicians not only in name, but in reality. But inexperience is a bad treasure, and a bad fund to those who possess it, whether in opinion or in reality; it is the source of both timidity and audacity."

The degree of knowledge to which they were to attain he thus defines:—"It is the business of the physician to know, in the first place, things similar and things dissimilar; those connected with things most important, most easily known, and in anywise known; which are to be seen, touched, and heard; which are to be perceived in the sight, and the touch, and the hearing, and the nose, and the tongue, and the understanding; which are to be known by all the means we know other things."

Enlarging upon these and kindred topics—all exhibiting an intensely practical mind—he must have alluded in terms

of biting sarcasm to the schools of the theorists, which rejected the humble teachings of nature, and occupied themselves with vain imaginings.

In conclusion, he thus addresses those who were attending their last course of lectures, and were about to enter upon the responsible duties of their profession:—"When you have selected the city of your future residence, consider well its situation—how it lies as to winds and the rising of the sun—whether north and south or east and west—consider also attentively the waters which the inhabitants use, whether they be marshy and soft, or hard, and running from elevated and rocky situations, and then if salish and unfit for cooking. And the ground, whether it be naked and deficient in water, or wooded and well watered, and whether it lies in a hollow, confined situation, or is elevated and cold; and the mode in which the inhabitants live, and what are their pursuits, whether they are fond of drinking and eating to excess, and given to indolence, or are fond of exercise and labor, and not given to excess in eating and drinking. From these things you must proceed to investigate everything else. For if you know all these things well, you cannot miss knowing either the diseases peculiar to the place, or the particular nature of common diseases. Thus you will be able to foretell what epidemic will attack the city, either in summer or winter, and what each individual will be in danger of experiencing from the change of regimen. You will also not be in doubt as to the treatment of the prevailing diseases."

His address concludes with that solemn and sublime admonition so frequently quoted, but so little heeded: "Life is short, and the Art long; the occasion fleeting."

With such views of the nature of the studies and duties of physicians, we cannot doubt what was the curriculum of study in the school of Cos during this period. First, the great Master opened the Sacred Book, the volume of science, and expounded one by one the aphorisms, explaining on what exact observation each was based, and what was its practical significance. Then grouping together such as had some special or general relation, he constructed systems having for their bases logical deductions from established premises. From the lecture they proceeded to the apartments devoted to the sick, where each student in turn was instructed by the Master in the practical application of the truths or principles just learned. Each student with his own finger learned the exact nature of the pulse in every form of disease; with his own hands he applied the most complicated as well as most simple surgical dressings; with his own eyes he studied the physiognomy of disease. Thus, under the medical supervision of the Master, he so studied and practised his profession as to become an expert in every branch—both of its science and of its art.

It is not surprising that the School of Cos, the great clinical school of the past, became so famous, and attracted pupils from such a distance and in such immense numbers. Its graduates went forth prepared for any emergency in practice. They began their career at an advantage which their rivals of the theoretical schools did not attain in a score of years of active duty. From the first they were skilful, hence confident, bold, and aggressive, while their competitors were timid, hesitating, and faltering. Throughout all Greece they became the chief physicians, and their services were often in demand at foreign courts.

The true glory of the ancient clinical school was in the practical union of the science and art of medicine in teaching. The hospital was the basis of the school; science was the guide and instructor of art; precept and practice went hand in hand. The student personally learned everything which is perceived in the sight, and the touch, and the hearing, and the nose, and the tongue, and the understanding. To remove the school from the hospital, was to divorce two branches of education mutually dependent upon each other for life, and even vitality. Educated in the science of his profession only, the student had no power to apply his knowledge. Educated only in the art, he had no

knowledge to apply. The true physician must therefore be educated in the hospital-school.

The clinical schools long maintained their supremacy. The intrinsic merit of their methods of teaching, the high and influential positions which their graduates attained, and the overshadowing influence of the great master of the school, gave them power and permanence. But in time they were corrupted, their customs perverted, and finally they disappeared in that dismal night of universal superstition, the Dark Ages. The clinical method of teaching was henceforth numbered among the lost arts. Here and there in the succeeding centuries we find a great mind seizing the grand idea of the Father of Medicine, and developing the rational system of teaching. Boerhaave, the modern Hippocrates, deserves especial mention, as he followed the original method of clinical instruction, and with great success. Students flocked to him from every part of Europe, and he became the most eminent instructor of his age.

In our own time there is a tendency to revive the Clinical or Practical Schools of the ancients. In Europe, and in England especially, the union of medical schools and hospitals is recognised as essential to the true success of the former. And the advantages that flow from this union are seen in the high standard of medical education which is maintained abroad, the rapid development of the medical sciences, and the practical character of the general practitioner. In our own country the value of clinical instruction has long been recognised, and feeble attempts have been made to supply the deficiency in the medical colleges. But instead of removing the colleges to the hospitals, the teachers invite the sick to visit their class-rooms and repeat the story of their sufferings. The student and patient are not brought in contact, and the instruction imparted, however valuable in itself, is practically lost. The student must learn, if he learn at all, by proxy. How much such knowledge will avail him when in after years he endeavors at the bedside to apply it, every one can truly estimate. Such schools are the theoretical schools of the ancients. They teach theories and systems, but they do not teach practical medicine. They educate the brain, but leave the hand palsied, the eye blind, and the ear deaf. Their graduates go forth to practical life like full-fledged eaglets deprived of wings. They lack the one thing needful to early and complete success—the power or ability to use their knowledge. Any system of medical education that does not supply this defect is unworthy the support of the profession. And such will yet be its most emphatic verdict. The plan of uniting didactic and clinical instruction by the union of schools and hospitals, has been much agitated within the last few years, and has received a cordial support from the body of the profession. Many schoolmen have opposed it with argument and ridicule, but every practitioner finds in his own experience overwhelming counter-arguments. How many times in the simplest operations or manipulations has he been embarrassed, and perhaps foiled, for the want of an educated touch? How frequently has he striven in vain to discriminate physical signs for the want of an educated ear? How many who have never had clinical advantages, have, after years of toil in practice, been easily supplanted by the student fresh from the hospital? Such arguments cannot be answered except by shallow sophistry. The tide of professional sentiment has been setting more and more strongly in favor of a radical change in our system of education. The profession have demanded that it should be more thorough and more practical. There can be but one change which can meet the requirements of the profession—and that is, a return to the primitive system—the union of hospitals and schools. It is scarcely a half-dozen years since the first effort was made in this country to unite clinical and didactic instruction, and to-day we witness its complete triumph.

By the wise liberality of the Commissioners of Public Charities and Correction of the City of New York, we have laid the foundations of an Hospital School within the

sacred precincts of these temples where the sick congregate in such vast numbers. And it is my pleasing duty, on this third anniversary, to welcome you to a true clinical school of the Hippocratic order. Here the school is located, because here is the hospital. Here the science and art of medicine are indissolubly united, the one being the helpmate of the other. Here precept and practice have embraced each other, no more to be separated. To these temples the sick turn their steps by thousands, each bearing the votive tablet to be placed conspicuously for your study. Here you may learn every phase and aspect of disease from living records, and accustom every sense to the quick perception of its ever-varying phenomena. Here you may open a book far more sacred than that which the ancients so much venerated, and study the rough sketches or delicate outlines of disease which pathology unfolds. From these seats, where you learn the principles of medicine, you go directly to the wards and personally test their value, and study the practical application of each precept. Here you may become learned in every branch of the medical sciences; there you may become skilled in every department of the art of healing.

We have in this college practically answered two objections to a clinical school. The first is, that students are liable to be diverted from the study of the science of their profession by attendance upon clinical instructions. The opposite has proved to be true. The student most devoted to clinical study, has also been the most thoroughly versed in the principles of his art. This fact has been observed of students who commenced their studies with clinical and didactic instruction combined. And it is but natural that this should be the universal rule. Why should the student of auscultation master the entire science by study in a closet before he begins to accustom his ear to the normal and abnormal sounds of the lungs and heart? The ear, the eye, the hand, are to be educated by long and skilful training as well as the mind, and no time should be lost in the short course of study allotted to the student. If this training for practical duties is postponed to a later and more convenient day, experience proves that it will never be accomplished. It has also been alleged that clinical teaching is injurious to the patient. Whoever has lingered behind the class in the wards to examine special cases more at leisure, has not failed to find patients complaining that the doctors had passed them by without notice. They believe that the whole class are consulting upon their cases. They are not only anxious to have a large number interested in their diseases, but those examined are often proud and boastful of the attention which they have received. From long personal experience in hospital practice, I am satisfied that clinical teaching is, with rare exceptions, useful to the patient. It revives his hope, and satisfies his longing for sympathy and attention. But while it is true that the sick not only cheerfully submit to physical examination but are often much gratified, the student should not be unmindful of the fact that he must handle them gently. The first lesson that you should learn in clinical instruction is *never to cause unnecessary pain*. By gentleness you insure the patient's confidence, and render your examination useful to yourself and pleasing to the sick.

You are now surrounded by every means necessary to your complete medical education. The result must rest with each individual student. No limit is set to your acquirements. You may, during your pupilage, become profoundly versed in any or all branches of your profession. No greater facilities than are now at your command can you require for the successful study of anatomy, physiology, chemistry, materia medica, surgery, practical medicine, and obstetrics. The opportunities which this hospital affords you for becoming personally familiar with every branch of practical medicine, are unlimited. No student should go out from this class unskilled. He has but to put forth his hand to become skilled in minor surgery, to use his ear to become expert in auscultation, to exercise his reason to be learned in diagnosis, prognosis, and therapeutic.

tics. May the deep disgrace which has often befallen graduates of other schools in not being able to apply simple surgical dressings, in being foiled in efforts at introducing a catheter, in practising auscultation, in the simple manipulations in obstetrics, never be experienced by a graduate of this school!

Never was the medical student stimulated by so many incitements to perfect himself in his profession. Our navy, rapidly expanding, is in such need of educated surgeons that promotion to the highest rank occurs in the second year. The army has absorbed thousands, and still calls for more. But the army and navy will have only the best.

I wish it were in my power on this occasion, the commencement of a course of lectures, to point out to you the royal road to knowledge, or to place in your hands a book in which medicine is made easy in twelve lessons. But this I cannot do. That road remains undiscovered, that book remains unwritten. Great as has been the advance of the sciences, wonderful as are the means by which they have enabled man to cheapen labor and mitigate the rigors of the primal curse, they have as yet failed to discover a method by which a student may sleep in the classroom and inhale knowledge, or saunter idly in the wards and become an expert even in the simplest art. Whatever dream you may have indulged of acquiring a profession without labor should to-day be dissipated. Effort and unceasing toil are the true aids to success. Let yours be the motto of the ancient Hippocratic school,

"LIFE IS SHORT, AND THE ART LONG; THE OCCASION FLEETING."

Reviews.

THE PRINCIPLES AND PRACTICE OF OBSTETRICS. Illustrated with one hundred and forty-nine lithographic figures from original Photographs, and with numerous woodcuts. By HUGH L. HODGE, M.D., Emeritus Professor of Obstetrics, &c., in the University of Pennsylvania, etc. Philadelphia: Blanchard and Lea, 1864. Pp. 550.

DR. HODGE has performed to the profession, in the publication of this work, a simple duty. During twenty-eight years he has been a public teacher of Obstetric medicine, and now at the close of his official career, we hold that he owes to the thousands of practitioners who have listened to his instruction, this elaborate and detailed statement of his opinions. And this is the duty of every public teacher, and we wish it were in our power to induce them to follow the example of the author of this work. How many eminent teachers are living in retirement whose pupils, now laborious practitioners, would rejoice to profit still by by their well digested experience? Every work of this kind bears on its title-page satisfactory evidence of the necessity of its publication.

The work of Dr. Hodge is something more than a simple presentation of his particular views in the department of Obstetrics; it is something more than an ordinary treatise on midwifery; it is, in fact, a cyclopædia of midwifery. He has aimed to embody in a single volume the whole science and art of Obstetrics. An elaborate text is combined with accurate and varied pictorial illustrations, so that no fact or principle is left unstated or unexplained. The plan of the work is thus given by the author:—"It consists in detailing the natural history of women, as far as the important functions of gestation and parturition are involved, and deducing, from the fact thus elaborated, those principles which should govern the Obstetrician." The body of the work consists of twenty-seven chapters, which severally discuss all the various subjects in obstetrics. In turning over the practical portions of the work we find little that provokes

criticism. The author has evidently prepared each chapter with great painstaking, and as a whole the treatise is highly creditable to Dr. HODGE, and does honor to our medical literature.

A TREATISE ON HUMAN PHYSIOLOGY, designed for the Use of Students and Practitioners of Medicine. By JOHN C. DALTON, JR., M.D., Prof. of Physiology, etc., etc. Third edition, revised and enlarged. Philadelphia: Blanchard and Lea, 1864. Pp. 706.

WE welcome the successive editions of this excellent work, as they give the certain evidence of an increasing desire on the part of the profession to acquire a knowledge of this fundamental branch of medicine. This edition is improved by the addition of some recent experiments of the author, on the secretion and properties of the human parotid saliva, and its quantitative analysis by Mr. Perkins, and the recent observations of Prof. Flint, Jr., on Stercorine Cholesterin and the effects of permanent biliary fistula, and the views of Prof. Wyman on Fissure of Hare-Lip. Several new illustrations have also been added.

A TREATISE ON THE CHRONIC INFLAMMATION AND DISPLACEMENTS OF THE UNIMPREGNATED UTERUS. By WM. M. BYFORD, A.M., M.D., Prof. of Obstetrics in Chicago Medical College. Philadelphia: Lindsay and Blakiston, 1864. Pp. 215.

DR. BYFORD has put forth this work to supply a deficiency in the ordinary treatises on diseases of women. The view taken is, that chronic inflammation and displacements are the primary causes of most symptoms, and that as the uterus has a large sympathetic influence, grave and even fatal disorders in other parts of the organism may be produced by its reflex actions. In a somewhat cursory examination of the work, we found much to commend in arrangement of subjects, and but little to criticise in the general discussion of topics. As an American work, we hope it will have a wide circulation.

MILITARY, MEDICAL, AND SURGICAL ESSAYS, prepared for the United States Sanitary Commission. Edited by WILLIAM A. HAMMOND, M.D., Surgeon-General U. S. Army, etc. Philadelphia: J. B. Lippincott & Co., 1864. Pp. 552.

In this elegant volume we have a complete collection of the memoirs on special subjects, prepared by prominent medical men, and published by the Sanitary Commission. The collection is prefaced by some very judicious remarks of the able editor on the aims and labors of the Commission. This volume will doubtless be eagerly sought for at home and abroad.

A HANDBOOK OF UTERINE THERAPEUTICS. By EDWARD JOHN TILT, M.D., Member of the Royal College of Physicians, etc. New York: William Wood & Co., 1864. Pp. 280.

THE peculiar views of DR. TILT on the pathology of uterine and ovarian diseases are well known to most of our readers. In this work we have the treatment of these diseases fully set forth in an extended and systematic discussion of the different remedies. On every page we find matter of interest to the practitioner. It is destined to be a popular work with the profession.

MENTAL HYGIENE. By I. RAY, M.D. Boston: Ticknor and Fields, 1863. Pp. 338.

DR. RAY has discussed the subject of mental hygiene with that clearness, conciseness, and good sense for which his writings are always distinguished. The work is replete with practical information of the highest importance to individuals and families. The secret sources of physical and mental imbecility are traced out by a master hand. We can only wish that every family would make this little book a daily study.

ESSAYS ON INFANT THERAPEUTICS, &c., &c. By JOHN B. BECK, M.D. Prof. Mat. Med. etc., etc. Third edition, enlarged and revised. New York: William Wood & Co., 1864. Pp. 167.

THIS is a new edition of the well known essay of Dr. BECK, which from its first issue has been a standard monograph.

Correspondence.

ON THE HYPODERMIC INJECTION OF SEDATIVES.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR—In the AMERICAN MEDICAL TIMES for July 30, 1864, there is an article on the "Hypodermic Treatment of Uterine Pain" by J. Henry Bennett, extracted from the London Lancet. The reprint of that article shows your belief that information on that topic will be gladly received by the profession, while Dr. Bennett does not seem to think that such a practice as he advocates is at all general.

My experience with this method of treatment goes back to the month of August, 1857, just seven years ago, and in the New York Journal of Medicine for Nov. 1858, pp. 340-341, will be found the *first two cases of hypodermic injection that were ever published in this country.*

I then stated that among the various uses to which I applied this method of treatment were—"for infra-mammary and ovarian pains with temporary relief; for insupportable neuralgia of uterine and ovarian origin with similar results, &c." Such are exactly the class of uses to which Dr. Bennett now calls attention. The first instrument made in this country was made for me by Mr. Tiemann from the model brought to this country by my friend Dr. Barker, and the india-rubber syringe then first used is a great improvement over the glass one. The canula was also made of steel. At that time I used a solution of the acetate of morphia grs. viij. ad ʒj., though now I always use Magendie's Solution made without acid.

At a meeting of the Medical and Surgical Society at Dr. Metcalf's shortly after, I showed this syringe, and expressed my conviction that it would soon be the pocket companion of all physicians. And, indeed, sir, I thought that our public use of it in Bellevue Hospital for so many years, and the reiterated expressions of approval by so many of our profession in this city, had removed the need for calling further attention here to the plan of treatment.

I can heartily endorse all that Dr. Bennett says in regard to the promptness and efficacy of these injections. It has often occurred to me to be called to cases of dysmenorrhoea and to relieve the patient before the syringe has been thoroughly cleansed and replaced in the case, and I have very often thus quieted those teasing false pains which so agitate and weary patients on the eve of confinement. I have injected everywhere over the surface of the body except the hands, feet, genitals, eyelids, ears, and scalp.

For some years back I have ceased to endeavor, as a rule, to inject the morphine in the neighborhood of the painful part, preferring to inject over the gluteal muscles just behind the crest of the ilium, over the floating ribs, or over the deltoid in the order named. It is always desirable to so inject the fluid that gravitation will assist in retaining it, as some drops may run out unless you use this precaution. By using Magendie's Solution of Morphine (gr. xv. ad ʒj.), made without acid, the amount required to produce an effect is much smaller than Dr. Bennett needs; and diminution in bulk is a great advantage, and diminishes risk of subsequent inflammation. In cases of cancer or other hopeless cases where we can do nothing but promote euthanasia, I instruct some nurse or member of the family in the use of the instrument, and make them procure one for themselves so as to be independent of me. A patient of Dr. Van Buren's, whom I often saw, had mor-

phine injected hypodermically daily for about a year, which was the most prolonged use that I have known. Some are nauseated by it, and are reluctant to return to the remedy. All are affected very promptly. It is desirable to be careful in its use where the kidneys are diseased. I once injected fifteen drops of Magendie's Solution in the arm of a gentleman with cardiac hypertrophy, slight albuminuria and casts, and he slept all that night and until the next evening, although he awoke in the morning after the injection quite rational, and could be awakened readily at any time during the day. Still his susceptibility showed another illustration of the value of the law that opium should be cautiously used in these cases. Yet I have used it in pregnant women who were the subjects of albuminuria. Indeed, it has never caused any other trouble in my hands than occasional nausea and boils. When long used over the ribs the skin becomes hard and drawn, like that over the prize-fighter's face, from condensation of the areolar tissue. I have used it in peritonitis, pneumonia, pleurisy, acute rheumatism, gout, passage of renal and biliary calculi, cystitis, neuralgia, restlessness, and insomnia; organic and functional diseases of the heart, lungs, liver, stomach, uterus, and ovaries; delirium tremens, puerperal mania, and convulsions, as well as in other cases which I do not at this moment recall. I have used it after obstetric operations and where an anodyne was indicated, while there was also much nausea. It is no part of my purpose to write an elaborate article on this subject, but simply to aid in calling attention to a method of practice with which very many of us are familiar; but I should regret to leave the impression that my extended use of the hypodermic syringe makes me unmindful of other modes of using anodynes. On the contrary, not a day of my life passes without my being called on to prescribe vaginal or rectal suppositories of the watery extract of opium or morphine, made with the butter of cocoa; or to give internally morphine, McMunn's Elixir, Dover's or Tully's Powder, opium, codéine, or chlorodyne.

Indeed, it is from the conviction that the practice of medicine would be utterly unsupportable without the power of relieving pain, that I have again recorded my testimony in favor of this prompt, mild, and most efficacious plan of administering anodynes, and paramountly morphine.

Yours,

GEO. T. ELLIOT, Jr., M.D.

18 WEST TWENTY-NINTH STREET, August 11th, 1864.

HISTORY OF THE AMERICAN MEDICAL ASSOCIATION.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR—I have read with great pleasure, in the number of your journal for August 27th, the "History of the Origin of the American Medical Association;" and I hope you will not consider me hypercritical if I point out a trifling error in that history.

It was a "National Medical Convention" which assembled in New York in 1846, and which was organized by the election of Professor J. Knight, of New Haven, as president. After transacting some preliminary business, this convention adjourned to meet in Philadelphia the following year. At this second meeting of the "Convention," a constitution for the American Medical Association was adopted, and the Convention resolved itself into the American Medical Association. The Association was then organized by the election of Professor N. Chapman, of Philadelphia, as president, and other officers were also elected.

The proceedings of these two Conventions have been published.

Yours,

ISAAC HAYES, M.D.

PHILADELPHIA, August 26, 1864.

IS OVARIOTOMY JUSTIFIABLE?

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR—The reasons offered by Professor Peaslee, in a recent number of your journal, in regard to the question, "whether

ovariotomy ought to be recognised as a legitimate surgical operation," do not, as it seems to me, cover the whole ground. The question is by no means wholly a *statistical* one, as he seems to take for granted. It is one in which the *heart and conscience* are as much, if not more, interested than the head.

We all know that our great master in surgery, Mott, has never performed ovariotomy. Have the advocates for this operation ever inquired why he has not? Does any one suppose he is ignorant of ovarian statistics? Or that Professors Meigs, Mutter, Liston, Duncan, the French Academy of Medicine, as well as nearly all the great surgeons of the age in all countries, are also ignorant on this point, and hence have regarded ovariotomy as unjustifiable? Did statistics show even more favorable results than they do, there is no reason to suppose that they would regard the operation in any different light. Our surgeons do not decline this operation because it is difficult, or requires any particular skill or anatomical knowledge; on the contrary, it is one of the simplest in all surgery. But they are unwilling to be instrumental in shortening human life, when there seems to be no evident necessity of taking such risk; they will not endanger their peace of conscience by undertaking a surgical experiment where a fatal result is as one in three; when, without such experiments, the patient may perhaps live for years in comparative comfort, and possibly recover. They do not think it right to frighten females afflicted with ovarian disease by predicting a fatal result without an operation, and that at no distant period; and then try to quiet their own consciences by leaving it *entirely* to said females to decide for themselves whether they will submit to an operation or not. I have never had the hardihood to perform ovariotomy; and I shall always have a higher opinion of the late Professor —, who, after opening the abdomen of a female afflicted with an ovarian tumor, immediately closed it without an attempt to finish the operation, previously saying to those present that, if there was any surgeon in the room who would like to finish the operation, he would be glad to consent to his doing so. This female lived fifteen years after in the enjoyment of very comfortable health. But the professor never made another attempt at the same operation, and always condemned it in his lectures.

I may further urge in my own behalf, as well as that of my surgical brethren generally:—1st. That the diagnosis in a majority of cases of ovarian disease is very obscure, and that the prognosis is to the same extent doubtful, if not unfavorable. 2d. That many females carry these tumors through a long life with comparatively little inconvenience; that in many cases they actually diminish in size, while the inconveniences attending them often nearly disappear. 3d. That the most favorable statistics show that nothing is gained *on the whole* as regards the prolongation of life by the operation; for it is found that, taking an equal number of females affected with ovarian tumors of equal ages and under as nearly as possible similar circumstances, *the average duration of life will be greater in those on whom the operation has not been performed than in those who have submitted to it.* So that statistics, in fact, condemn the operation as unjustifiable. 4th. In all the other great operations the surgeon has no misgivings; he is laid, as it were, under *duress*, as Professor Meigs would say, to operate if circumstances required, and he has no severe qualms of conscience should the case prove afterwards fatal. 5th. Far otherwise, however, must it be with every properly constituted mind when a fatal result attends an operation regarded as wholly unjustifiable by the highest authorities in surgery, and by nine-tenths of the profession generally. 6th. From what has been offered, it may safely and justly be inferred, that our principal surgeons do not envy the professional reputation acquired by the operation in question; they do themselves honor by showing that they have studied ethics in a wiser school, and that they prefer peace of mind and a good conscience to transient notoriety and pecuniary rewards.

P.

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